

the controversial extract from the Proxy Statement in its wider context to the witness in re-examination⁷¹. Mr Kelsey's real disagreement was with the implication that at the time he regarded the Go-Shop mechanism as, in effect, a sham. At the end of this portion of his testimony, he critically explained his clear and coherent practical view of the status of the Go-Shop mechanism as follows:

*"I go back to what I said many times before, that under the go-shop we were entitled to entertain superior proposals and if we found a superior proposal that was -- that qualified, we would follow that superior proposal."*⁷²

129. Mr Millett's cross-examination of Mr Kelsey clearly established that the Go-Shop process made it somewhat difficult for competing bids to be made, Premier's blocking position apart. The Proxy Statement containing detailed information about the Company was only filed after the process ended. Access to 'inside' information without negotiating a non-disclosure agreement was problematic. Raising financing within the requisite timeline could be potentially difficult for some interested competing bidders. But whether any of these factors mattered in real commercial terms crucially turns on whether any serious potential bidders were actually deterred from making a superior proposal.
130. Mr Seetharam attacked the fairness of the process and most pertinently stated in his First Affidavit that Stockbridge did not pursue a bid through the Go-Shop process because it was told it would have to do so based on publicly available information. Although Stockbridge was also told it could later make an unsolicited bid, this was not viewed as a viable option because of the informational advantages enjoyed by the Buyer Group and the controlling position of Premier. On its face, this evidence did not even seek to support a finding that the Go-Shop process operated in a way which actually (as opposed to merely hypothetically) deprived the minority Shareholders of the benefit of a superior competing bid.
131. Under cross-examination by Lord Grabiner QC, it was admitted that Stockbridge was closely connected with Berkshire Partners LLC and that *"together Stockbridge and Berkshire had a first-class understanding of private equity investments... [i]ncluding take-private transactions"*⁷³. Mr Seetharam was reluctantly forced to admit that whatever ongoing review of the position may have taken place, after Stockbridge learned of the Merger in April 2017 and considered its options, it never decided to actually make a topping bid⁷⁴. The strong inference from this evidence is that the Go-Shop process itself had no pivotal impact on Stockbridge's decision not to make a competing bid. Mr Seetharam was also keen to point out that Stockbridge was a long-term Shareholder, and in this regard creditably conceded that pre-Merger attempts to

⁷¹ Transcript Day 4 page 106 line 12–page 108 line 5.

⁷² Transcript Day 4 page 53 lines 15–19.

⁷³ Transcript Day 5 page 4 line 17–page 5 line 1.

⁷⁴ Transcript Day 5 pages 16 line 22–page 17 line 4.



obtain information about the Company's affairs had been dealt with by the Company in the same generally restrictive way that other public companies dealt with similar requests⁷⁵. However I also inferred from this evidence in relation to Stockbridge's historical connection with the Company that it was in a better position than a complete outsider to form a view as to whether it made sense to make a "topping bid".

132. So Stockbridge clearly elected not to make a competing bid, in part at least because its best judgment was that it would be an uphill task to out-bid a deal supported by a controlling shareholder. It also seems somewhat surprising that if the Transaction Price was viewed by Stockbridge as obviously far lower than fair value that it did not demonstrate a greater interest in making a superior bid. Other potential bidders were notified of the Go-Shop process but, as Mr Kelsey suggested at the time, any seriously interested parties would likely have made an unsolicited bid after the Merger Agreement was announced without waiting for the Go-Shop process to start and without waiting for the Special Committee to solicit competing bids. No other potential bidders came forward.
133. The absence of competing bids is a factor which cuts both ways. I accept that in part the Transaction as consummated in the Merger Agreement broadly viewed did not encourage competing bids from the speculative investor or the faint-hearted. But I equally accept that the absence of competing bids also suggests that there was no deep reservoir of untapped alternative potential purchasers ready and willing to make a purchase. The Special Committee was commercially entitled to form the view that 'a bird in the hand was worth two in the bush', assuming of course that the Transaction Price was indeed fair to the minority public Shareholders. The proposed Merger Transaction was in broad principle one Premier was entitled to press for. Mr Kelsey explained why the final offer was accepted rather than risking losing the deal and considering alternative possible transactions in the following logical way:

*"No, what we – at that stage we looked at – we assessed what alternatives there could be, other than accepting an offer, if that offer was deemed to be fair and we wanted to accept it. And the alternatives didn't look attractive, weren't really going to add anything and, in any event, BPH, Barings, whatever you want to call it, could block it, because they were a [majority] shareholder, if they didn't like them."*⁷⁶

Summary

134. Accordingly, the Transaction Price does provide some evidence of what price a willing sophisticated seller and a willing sophisticated buyer were willing to exchange for the Company's issued Shares in the real world, namely cash consideration in excess of US\$2

⁷⁵ Transcript Day 5 page 29 lines 12-21

⁷⁶ Transcript Day 4 page 42 lines 1-8



billion⁷⁷. Moreover, Houlihan Lokey advised that the price was fair. The fact that it was in the 'same ballpark' as the Market Price does suggest to some extent that the Market Price is not a wholly inappropriate indicator of the fair value of the Shares, either as a cross-check for the Market Price or in its own right. The Transaction Price is what the Company itself initially represented was the amount which reflected the fair value of the Shares (including a premium). At first blush, the Transaction Price appeared to me to have much more credibility than the Market Price as an indicator of fair value, most importantly because it was informed by MNPI which was not available to the market. But the entire concatenation of circumstances surrounding the Transaction process still leaves room for anxious doubts about whether it can be relied upon (in part or in whole) without considering the more elaborate DCF analysis in relation to which both Experts, for somewhat different reasons, undertook to assist the Court.

FINDINGS: WHAT VALUE CAN BE DERIVED FROM AN APPROPRIATE DCF VALUATION OF THE SHARES?

Overview

135. The question of what weight should be given to a valuation based on a DCF analysis will be considered after first determining what value is indicated by an appropriately reliable DCF analysis. The main competing valuations were the following:

- (a) Professor Fischel: a range of US\$28.04-US\$41.45;
- (b) Professor Gompers: US\$76.51; and
- (c) Houlihan Lokey, independent advisers to the Special Committee: US\$27.63 - \$39.03 (relied upon by the Company as a fall-back position).

136. In his closing oral arguments, Mr Boulton QC invited the Court to consider Houlihan Lokey's work when evaluating the competing DCF analyses:

"I do want to spend three or four minutes, my Lord, on Houlihan Lokey because, in my submission, they have not featured as heavily in this hearing as they should have done, given their role. They were -- and this is not contradicted -- the independent financial adviser appointed by the special committee. More than that, they used the April 2017 projections that had been

⁷⁷ Proxy Statement, page 49.



prepared by management and they, therefore, had unfettered access to anything that Professor Gompers identifies as MNPI. We will come on to the slight expansion of that category in Professor Gompers' oral testimony from his written. But your Lordship will recall in his reports he only identifies the projections. Well, Houlihan Lokey have those projections, my Lord. Nobody has suggested they are not independent....

And one sees that from their analysis at {H/337.3/1}, which is the presentation to the special committee, which has been referred to -- this is the version referred to and relied on by Professor Gompers. If we go to page 6, {H/337.3/6}, your Lordship will recognise the football field. And this essentially is the basis by which Houlihan Lokey satisfied themselves that the consideration in this transaction was fair to the holders of shares, and they did that by reference to a DCF that covered a broad range from \$27 to \$39, rounding down in each case, and also by reference to three selected companies analysis comparables, two of which produced ranges below the transaction consideration and one produced a range that covered the transaction consideration, although was, at its midpoint, somewhat lower⁷⁸...

137. The Dissenters' Written Closing Submissions summarised their position as follows:

"465. Finally on this part of the valuation case, there is striking support for the conclusion as to value reached by PG, namely a value of \$76.51 per share.

466. This is to be found in the Bach Model which passed back and forth between the Company and its management and Baring during the summer of 2017 (see the numerous iterations of the Bach Model, with email discussion about detailed aspects of the inputs, set out in the Appendix of Bach and Bank models with this Closing. Within the Bach Model not only were there very detailed spreadsheets concerned with all aspects of the Company's business, including of course borrowing and covenant compliance, but there was also a spreadsheet tab containing a DCF valuation. This spreadsheet was designed to allow the user

⁷⁸ Transcript Day 13 pages 87 lines 9- 24; page 89 line 19 --page 90 line 9.



to choose between various scenarios. This DCF valuation is referred to by PG at PG1, [360] to [367]377. The valuation would imply a range of per share values at the \$80 to \$90 mark.”

138. The Experts were agreed in general terms on the appropriateness of using the August 2017 Projections as the foundation for the DCF analysis. Professor Fischel, of course, in principle believed that management estimates of what might happen were less reliable than other market data such as the Market Price and the Transaction Price. However, there was some controversy as to precisely how they should be interpreted. Should they be interpreted, as it were, as “best estimates” on their face? Or should account be taken of Mr Halder’s evidence at trial that they were “stretching” estimates which were not risk-adjusted? Ancillary to this question was whether the Company should be able to rely on downwards adjustments to the China Bilingual projections based on work concluded by Ian Johnson in late July but not initially incorporated in the August 2017 Projection, supposedly due to an oversight. In my judgment it is obvious that those adjustments must be taken into account, even though the timing of the adjustments (shortly before presumably huge sums had been borrowed on the strength of more optimistic projections) was at first blush somewhat eyebrow-raising.

139. As noted above, the following headline issues were controversial at trial:

- (a) what adjustments should be made to the August 2017 Projections as regards the China Bilingual Project and as regards exchange rates in relation to foreign currency earnings;
- (b) the appropriate terminal growth rate; and
- (c) how the appropriate discount rate or “beta” should be determined and, having regard to materiality, the following sub-issues:
 - (1) the use of weekly data,
 - (2) the need for a ‘Blume’ adjustment, and
 - (3) the cost of debt.

The reliability of the August 2017 Projections

140. In the Dissenters’ Written Closing Submissions, it was argued that Mr Halder “parroted the party line on a number of issues, most notably, projections. For example, where he was questioned on the forecasts, he was at pains to repeat that the mantra that these



were “ambitious but achievable” though, tellingly, he said that he couldn’t remember “the exact person who came up with the [phrase]” {Day2/190:9-14}⁷⁹. In the next paragraph, the following point was made:

“36. The Court is invited to have regard to the numerous contemporaneous documents which contradict Mr Halder in which it was suggested to third parties that the projections represented ‘best estimates’. That is what he himself told the SC on 21 April 2017 – that the April projections were management’s ‘current best good faith estimates of the Company’s future performance’ {H/301/2}.”

141. It matters not that the term “ambitious but achievable” may well have been suggested to Mr Halder by an attorney in the process of preparing his written evidence for trial. The question is whether that term accurately reflected the way in which the estimates had been prepared. I accept Mr Halder’s characterisation of the estimates as being “ambitious but achievable” as truthful, and that this was not only the way in which he prepared his own forecasts but also the way in which he believed management projections were typically prepared⁸⁰. Clearly during the Transaction process Mr Halder did not seemingly mention the limitations of the estimates; that they were not risk-weighted and that he always prepared “stretching forecasts”⁸¹. Nor did he, perhaps, mention that short-term estimates were likely to be more accurate than long-term estimates. There is no suggestion that he was asked about any such limitations by the Special Committee and omitted to mention them. In supporting the loan-raising efforts of the Buy Side which the Sell Side (Premier) would benefit from, it seems obvious that his “brief” was to “talk up” up future prospects, not to talk them down. In preparing his evidence for the present trial, his “brief” was clearly to focus on the limitations inherent in the estimates rather than strengths.
142. In my judgment there was no material inconsistency between Mr Halder’s pre-Merger Agreement position and his evidence at trial. The April and August 2017 Projections were both “current best good faith estimates of the Company’s future performance” (as he told the Special Committee) and “ambitious but achievable” as he told this Court. As I noted above, the Vice-Chancellor in *In re Petsmart, Inc* 2017 WL 2303599, upon which Mr Adkin QC relied in his opening oral submissions, adopted the following test for reliability in relation to management forecasts (at paragraph 32):

⁷⁹ Paragraph 35

⁸⁰ Transcript Day 2 page 226 line 10-page 228 line 6.

⁸¹ Transcript Day 2 page 50 lines 19-21.



"The first key to a reliable DCF analysis is the availability of reliable projections of future expected cash flows, preferably derived from contemporaneous management projections prepared in the ordinary course of business. As this court has determined time and again, if the 'data inputs used in the model are not reliable,' then the results of the analysis likewise will lack reliability. And, as the experts in this case both agree, to be reliable, management's projections should reflect the 'expected cash flows' of the company, not merely results that are 'hoped for'." [Emphasis added]

143. Professor Fischel cited an academic text in support of his opinion *"a DCF analysis requires the use of expected cash flows, which reflect the probability-weighted average of all possible outcomes"*. On this basis, he contended that even with the adjustments proposed in Appendix D to his Report, the August 2017 Projections were *"not well-suited for use in a DCF analysis"*⁸². Such a strict reliability test was not supported by any judicial authority. Professor Gompers contended for a more flexible reliability test without seeing the need to cite any authority. As mentioned above, the Company argued in Lord Grabiner's opening oral submissions that *Dell, Inc.-v-Magnetar Global Event Driven Master Fund Limited* 177A.3d 1 (2017) (Supreme Court of Delaware) reflected a general move away from traditional reliance on DCF valuations in Delaware. *Dell* can be read as sounding a warning about relying wholly on a DCF analysis to produce an improbable appraisal result: the trial judge valued the company at \$7 billion more than the transaction price and gave no weight at all to strong market price evidence (based on a large public float and a robust sales process). However, *Dell* does not support any new approach to determining when management forecasts are sufficiently reliable to be used to construct a credible DCF model. The management projections in *Dell* were held to be *"obviously unreliable"* in circumstances quite different to those in the present case:

"The record simply does not support the Court of Chancery's favoring of management's optimism over the public analysts' and investors' skepticism—especially in the face of management's track record of missing its own projections. (Even Mr. Dell doubted his management team's forecasting abilities and conceded at trial, "We're not very good at forecasting.")..."

Given that we have concluded that the trial court's key reasons for disregarding the market data were erroneous, and given the obvious lack of credibility of the petitioners' DCF model—as well as legitimate questions about the reliability of the projections upon which all of the various DCF analyses are based—these

⁸² Fischel Report, paragraph 68.



factors suggest strong reliance upon the deal price and far less weight, if any, on the DCF analyses.”⁸³

144. Mr Adkin QC in his closing oral arguments aptly relied upon the following passage in the Delaware case of *Open MRI Radiology v Kessler*, Court of Chancery for the State of Delaware, C.A. 275-N (Strine, Vice Chancellor):

“The most important input necessary for performing a proper DCF is a projection of the subject company’s cash flows. Without a reliable estimate of cash flows, a DCF analysis is simply a guess. Fortunately, Delaware Radiology was not engaged in a complex business and the operations of Delaware I and II provided a foundation for making some reasonable estimates of future performance. Of even greater utility, Carr of Tri-State made detailed projections of the performance of Delaware I, III, and IV for non-litigation use...”⁸⁴

The projections for Delaware I were used in contemplation of securing financing from the Wilmington Savings Fund Society when Delaware I was being expanded and adding a second MRI magnet. The pro forma projections present the anticipated performance for Delaware I, including scan volume projections, for the two years from October 2003 through September 2005. These were provided to the Kessler Group in October 2003 when the Broder Group was requesting personal guarantees for Delaware I’s expansion. The projections for Delaware III also were disclosed to the Kessler Group in October 2003, and these projections were used to secure financing for the equipment to be used at the Center. The projections for Delaware III, then, were prepared by October 2003. Similarly, Carr prepared two-year projections for Delaware IV to secure financing for that Center’s equipment, which was provided by PNC Bank on March 9, 2004. Traditionally, this court has given great weight to projections of this kind because they usually reflect the best judgment of management, unbiased by litigation incentives. That is especially so when management provides estimates to a financing source and is expected by that source (and sometimes by positive law) to provide a reasonable best estimate of future results. Therefore, we have regarded with rightful suspicion attempts by parties who produced such projections to later disclaim their reliability, when that denial serves their litigation objective.”

145. In the present case, the Management’s Projections were represented to the Special Committee as “best estimates” and provided to Baring for deployment in finance-

⁸³ At pages 44; 64.

⁸⁴ At pages 64-65.



raising efforts. They were used by Houlihan Lokey to prepare a DCF model which was relied upon together with other *indicia* as the basis of its fairness opinion. Any suggestion that the April and/or August 2017 Projections are entirely unsuitable for conducting a DCF analysis must be roundly rejected. Finding that forecasts are sufficiently reliable in general terms to be deployed in the context of producing a DCF model does not discharge the Court's duty to critically assess, with the help of expert and factual witnesses, how reliable particular elements of the estimates are in the circumstances of the particular case. It is inherent in the nature of all estimates, as the Proxy Statement cautioned, that they are subject to various contingencies and risks and that they do not purport to represent "actual" future performance. This conclusion finds support in the previous decisions of this Court.

146. In *Re Integra* [2016 (1) CILR 192], Jones J was required to choose between a market-based valuation approach contended for by the company's expert or a (75%) DCF valuation which was contended for by the dissenters' expert. The company's management projections had been prepared against the background of the pending merger and were used as the basis for the fairness opinion. The company's expert contended that "*management and the analysts have been repeatedly over-optimistic about the company's anticipated performance*". Jones J, after noting this criticism, proceeded to tacitly accept without elaboration that the projections met the minimum requirements for reliability, subject of course to further scrutiny:

"54...The fact that a high proportion of the value reflected in the experts' DCF calculations is derived from the terminal value calculation means that the resulting value is very sensitive to small assumption changes. For these reasons it is particularly important that the cash flow projections/models are subjected to an in-depth review and analysis."

147. In *Shanda Games*, for instance, both experts carried out a DCF valuation and Segal J resolved disputes about the extent to which the relevant management projections were entirely reliable in their original form or required adjustment in light of criticisms by the dissenters' expert. It was common ground that the projections could be used to some extent. The "*revenue intensity*" column was a particular aspect of the management projections the reliability of which was disputed. Segal J resolved the dispute in the following way:

"113. It seems to me that on balance the evidence suggests there was an error in the model which needed to be corrected. I also consider that in circumstances where Shanda had been given an opportunity to provide such an answer"



resolve the apparent errors and inconsistencies and demonstrate that their model and projections were reasonable) but failed to do so, I can and should infer and conclude against Shanda that there were errors and that the forecasts in this respect are unreliable. Furthermore, it seems to me to be right that, having concluded that there is an error which needs correcting, in the absence of any alternative corrections from Professor Jarrell (or evidence from Shanda), I should accept Mr Inglis' evidence and corrections. His methodology seems to be reasonable and realistic and, in so far as he has adopted a correction that treats revenue intensity as being in need of an upward adjustment (rather than royalties and fees as being in need of a downward adjustment) this seems to be fair ..."

148. The approach Segal J adopted to resolving disputes between the experts as to how future cash flows should be estimated was only partially subject to appeal and was ultimately approved by the Court of Appeal. These judgments illustrate that a DCF valuation can be relied upon by this Court even if the reliability of management projections are disputed in significant respects. Martin JA in *In re Shanda Games* [2018(1) CILR 352] described the disputes in the following way (at page 395):

"64 In the present case, the judge had to resolve disputes between the experts relating to whether cash flows should be estimated in two stages or three; as to whether cash flows in the first period should be based on the company's own management projections or on figures derived from the performance of similar companies; as to how certain elements of the company's business, in particular the likely performance of one of its internet games, should be reflected in the cash flow estimates; and as to how the discount rate should be ascertained. Only three of his conclusions on valuation methodology are now disputed, all of them by the dissenting shareholders. The first two concern the judge's assessment of beta ("the beta point") and the small stock risk premium ("the SSRP point") in the ascertainment of the discount rate; the third of them arises out of his decision to adopt a three-stage approach to the assessment of cash flows ("the transitional period point")."

149. In *Re Qunar Cayman Islands Limited*, FSD No 76 of 2017, Judgment dated May 13, 2019, Parker J placed more reliance on the adjusted management projections in a section 238 appraisal case where both experts were seemingly agreed on the general reliability of the projections. Parker J explained his approach as follows:



“Management Projections

177. As the basic premise underlying the DCF methodology is that the value of the company is equal to the value of the projected future cash flows (discounted to the present value at the opportunity cost of capital), the first part of the calculation involves estimating the values of future cash flows for a discrete period based on contemporaneous management projections. Both experts agree that the Management Projections are the most useful starting point when determining the value of the Company using the DCF method and so it is necessary to consider the important matters between them on this issue.

178. Since they were produced in August 2016 and the Valuation date is some six months later on 24 February 2017, the experts agree that the Management Projections should be updated to reflect the Company's actual performance. Actual results for 2016 and the 2017 budget had been produced by then and the results for Q1 2017 were beginning to be known. The experts worked from the updated projections.

Approach

179. I accept the Dissenters' argument that the court should not defer to projections of the future performance of the Company simply because they have been made by those within the business at the relevant time. Where there are legitimate concerns that projections are unreliable, the court with the assistance of expert evidence and all relevant information available to it, is able to determine whether those projections are reasonable.

180. However, an important part of the analysis is what view the senior management of the Company came to and on what basis. They will ordinarily be in the best position to make reliable projections because it is they who have experience of running the actual business. In addition, country, sector and competitor knowledge will also be critical to the assumptions made in the forecasts. Ordinarily, absent a good reason to do so, one would not second guess the Management Projections. They are, after all, subjected to external scrutiny by market analysts on an ongoing basis and one might reasonably expect some contemporaneous challenge or public comment if that had come to light.

181. If nevertheless it can be shown that they are obviously wrong, careless, or tainted by an improper purpose (biased), that is a different matter and the court would revise them.



182. *It is important to bear in mind that they are being challenged in litigation, ex post facto, through expert evidence. Neither expert is experienced in the OTA market in China, nor the Company's specific business or strategy at the relevant time. An expert coming to a different view in this context is not a sufficient reason to make adjustments to the projections. The Company was making projections from real time information and knowledge. Here the analysis is to a large extent second hand, made some time later and involves second guessing judgments that were made at the time. It seems to me that I would need persuasive evidence to find that the projections made were flawed and to substitute my own opinion (or that of the expert's) for that of the management at the Company and therefore adjust them in the ways Mr Osborne and the Dissenters require."*

150. This valuable judicial commentary does not suggest a fundamentally different approach to that adopted by Segal J in *Shanda Games*. But Parker J's observations do add an important gloss. If management projections are generally reliable, the Court should be cautious about allowing expert witnesses to effectively substitute their uninformed judgments about the company's future business prospects for the judgments of those with intimate inside business knowledge. The degree of caution, to my mind, will usually depend on whether the disputed adjustments are indeed primarily dependent on questions of insider business judgment, rather than matters which are really questions of common sense or expert valuation methodology. However, *Re Qunar* also provides helpful guidance as to how to approach the issue of whether or not management projections are suitable in general terms as a basis for a DCF valuation analysis. Earlier in his judgment, Parker J made the following critical assessment of the way in which the management projections had been prepared:

"112. Mr Zhu, the Company's former CFO, was responsible for preparing the Management Projections. I found him to be an intelligent and straightforward witness. He had experience in accountancy and banking. I formed the view that he understood the Company's business in depth, from which he was able to prepare the projections and he defended them on a reasonable basis under cross examination.

113. I have reviewed the transcript of the Management Meeting which took place on 7 November 2017 and I am satisfied that the evidence he gave in court is consistent with the answers he gave to questions put to him at that meeting, as well as the responses to the various information and data requests from the experts. At trial he strongly and credibly refuted any suggestion that the Management Projections were prepared from the point of view of financial self-interest or a desire to assist the majority shareholder to keep the share price low to effect the merger."



151. The approach Parker J effectively adopted to the threshold question of the general reliability test was to find that management projections can potentially be used as the basis for a DCF valuation where they have been prepared in good faith by a competent management team which understands the business and is capable of making informed judgments about future performance. This appears to me to be consistent with the tacit approach in the earlier local cases and the Delaware appraisal cases to which I was referred. Mr Halder described the Company's April and August 2017 Projections as "*ambitious but achievable*" forecasts. The Company expressly advised Houlihan Lokey, for the purposes of their advice to the Special Committee dated April 25, 2017, that they could assume that the Projections had been "*reasonably prepared in good faith on bases reflecting the best currently available estimates and judgments of such management as to the future financial results and condition of the company*"⁸⁵. In my judgment they meet the legally recognised minimum standards of reliability for use as a basis for a potentially credible DCF model in all the circumstances of the present case. They were not prepared with the starry-eyed frame of mind described by Jane Austen in '*Sense and Sensibility*': "*to wish was to hope, to hope was to expect*". After all, Mr Halder was a Chartered Accountant.
152. The April 2017 Projections were developed over time out of annual budgets and prepared under Mr Halder's oversight. Although it seems clear that both the November 2016 Projections and the April 2017 Projections were prepared with the proposed sale of Premier's majority stake to some extent in view, there is no suggestion that Mr Halder was forced to prepare his projections in an overly optimistic way. Nor is there any suggestion that any significant market actors viewed the Projections as wholly unreliable. The August 2017 Projections which were substantially based on the earlier Projections were, I find, sufficiently reliable (subject perhaps to some adjustments) to form the basis of a credible DCF valuation.
153. But, it bears repeating, this does not exclude the need in the context of a judicial appraisal proceeding to test the accuracy of the estimates and make appropriate adjustments with a view to determining the most realistic forecast of the Company's future performance. Accepting management forecasts as sufficiently reliable for use in a DCF valuation does not mean that the Court cannot limit the weight to be given to the resultant valuation depending on the degree of reliability the Court can properly place on the estimates in question.

⁸⁵ Proxy Statement Annex E, page E-3.



The need to make downward adjustments to reflect adjustments made to the China Bilingual 5 Year Forecast

How the need to consider making adjustments to the August 2017 Projections arises

154. As already noted above, Ian Johnson testified that in May 2017 Mr Andrew Fitzmaurice and Mr Graeme Halder asked Ms Tang and Mr Johnson to prepare a 5 year forecast for the China Bilingual business. The forecast model was 'completed' on July 26, 2017. The result of this analysis was projections far lower than the previous China Bilingual projections which had been based solely on the performance of the NACIS school in Shanghai. Account had to be taken of the fact that fee increases required regulatory approval. The lower forecast projections were also because, *inter alia*, the proposed schools were to be set up in smaller, less wealthy and more remote cities, resulting in likely far lower full-time enrolment ("FTE") targets being achieved. Mr Halder received this update before the August 2017 Projections were completed, but was so busy at the time that he failed to consider it and incorporate it into those projections. However, he conceded that he was aware "*at a high level*" that the numbers had to come down and made some partial downward adjustments in the August 2017 Projections⁸⁶. The way in which Mr Halder explained the failure to give full effect to the China Bilingual 5 Year Forecast was perhaps the least convincing aspect of his testimony, albeit on a very peripheral matter.
155. It seemed more likely to me during his evidence that Mr Halder was somewhat uncomfortable with the notion of making significant downward adjustments to more optimistic projections he had recently been involved in 'hawking' in the lender presentations. On any view, if his professional approach was to prepare forecasts which had no risk weighting in them, it would be odd for one slice of the August 2017 Projections to have risk weighting while most of the forecasts did not. Another possible explanation for their omission is that the new model was incomplete and only preliminary in character. Whether or not the China Bilingual downward adjustments were omitted in full-blown form by accident or design is really by the way.
156. Not only did Mr Johnson contend for modifying the China Bilingual element in the April 2017 Projections. He also supported the Company's case by testifying under cross-examination by Mr Adkin QC that the Parthenon Reports did not provide a solid basis for projecting future cash flows. This was because despite the general utility of those reports in terms of providing background research "*they failed to take into account any of the difficulties and the barriers to entry.*"⁸⁷ The Dissenters contended that the true value of this project was being understated. Although it is entirely understandable that the Dissenters should cry "foul", I can find no basis for doubting the straightforward, coherent and clear evidence of Mr Johnson on this issue. Before a

⁸⁶ Transcript Day 2 page 204 line 24-page 205 line 21.

⁸⁷ Transcript Day 3 page 20 lines 2-14.



detailed analysis of the China Bilingual project was carried out, reliance was placed on the past performance of one successful school. This aspect of the April Projections gave a rose-tinted view of the prospects; so did the Parthenon Reports which were deployed by Baring when making pitches for lending. But there was no deception, because it was clear on the face of the relevant document that no specific projections had been made in relation to projected future schools.

157. Would it be naïve to believe that the timing of Mr Johnson's work, after the Merger Agreement and before the EGM which would likely trigger dissenter litigation, was entirely neutral in its effect on the contents and of the China Bilingual 5 Year Projections? While I accept the core integrity of the analysis that was carried out, I do not ignore the fact that the work carried out by Mr Johnson and his colleague Ms Tang (who was said to possess valuable local knowledge) appeared designed to identify downside risks rather than to carefully evaluate the appropriate weight to be given to both upside and downside risks. Professor Gompers objected to these new Projections on the grounds that they appeared to be "*too conservative*"⁸⁸. To the extent that Mr Johnson conceded that the China Bilingual Model he emailed to Mr Halder on July 2, 2017 contained numbers which were "*a work in progress*", and the document was acknowledged by Mr Fitzmaurice as a "*a useful start*", caution is required in evaluating what adjustments should indeed be made⁸⁹. Further work was done on this draft after Mr Halder commented in an email dated July 21, 2017 on what he described as "*a good start*". The model ("*Bilingual Schools-Rolling Forecast Model-26 July 2017*") incorporating these comments was sent back to Mr Halder (copied to Mr Fitzmaurice) by Mr Johnson by email dated August 1, 2017.
158. Mr Halder's Second Affidavit gives a fulsome explanation as to how it is (in a busy time leading up to the EGM) that he failed to appreciate that the new model justified a materially lower forecast for that business segment than was suggested by the August 2017 Projections. He fairly points out the latter document was only intended to be for internal management use. Mr Halder avers that "*these projections could and should have been subject to adjustment for Mr Johnson's China Bilingual projections and risk-weighting (please see paragraph 24 below)*" (paragraph 23). He then explains (in paragraph 24) that his projections are not usually risk-weighted:

"...This arises in part from my desire to stretch the business, in part from the difficulty in modelling the risks and in part from the fact that modelling risk weighting would not have materially improved our day-to-day decision making because the business was sufficiently strong to withstand individual schools materially underperforming...and as a business we had already

⁸⁸ Supplemental Report, paragraph 294-300.

⁸⁹ Transcript Day 3 page 6 line 12-page 8 line 4; page 10 line 16-page 11 line 1.



decided to accept the large risks associated with doing business in many of the markets we were in, particularly China."

159. The assertion in a single sentence that *"these projections could and should have been subject to adjustment for Mr Johnson's China Bilingual projections and risk-weighting"* is somewhat lukewarm support for the Company's position on this issue. No explanation is offered as to why risk-weighting should, contrary to his historic approach, have been applied exclusively to this aspect of the Company's Projections. And Mr Halder in explaining his own contrary approach to projections casts doubts on both (a) the viability of undertaking a risk-weighting exercise at all, and (b) the utility of such an exercise as a practical management tool. It is also unsatisfactory that as the Company's Chief Financial Officer at material times who was ordinarily in charge of preparing Projections, it was unclear to me when, if at all (prior to his Second Affidavit sworn on April 10, 2019 after the termination of his employment), Mr Halder himself actually blessed the China Bilingual Model as an update to the August 2017 Projections.

160. Professor Fischel appeared to regard it as obvious that the August 2017 Projections should be adjusted *"to reflect management's latest views on the prospects for its China Bilingual Initiative"*⁹⁰. Professor Gompers countered that July 2017 China Bilingual modifications *"are incomplete and do not appear to be a measure of expected cash flows, which makes them unreliable to be used in a DCF valuation"*⁹¹. The Company succeeded in demonstrating (principally through Mr Johnson's evidence at trial) that the July 2017 China Bilingual analysis was obviously more sophisticated (or detailed) than the previous analysis, so I am unable to accept Professor Gompers' broad-brush dismissal of the work described by Mr Johnson. On the other hand the Dissenters succeeded in raising doubts about what to make of the somewhat curious circumstances in which it is contended that the August 2017 Projections should be adjusted on the basis of the first set of risk-weighted projections conveniently prepared on the eve of the EGM with a whiff of dissenter litigation in the air. Accordingly, in light of the importance of this question to his valuation, Professor Gompers' more detailed critique of the extent to which this new material should be used to make the adjustments to the August 2017 Projections which were applied by Professor Fischel requires more careful assessment.

⁹⁰ Expert Report, paragraph 67.

⁹¹ Supplemental Expert Report, paragraph 289.



China Bilingual 5 Year Forecast: was it incomplete?

161. Professor Gompers in his Supplemental Report⁹² opined that the Model finalised on July 26, 2017 was incomplete because a Summary page which had projections for a total of 8 schools leaving blank placeholder rows for another 9 schools. The April 2017 Projections contemplated 20 school openings through FY2023 while the August 2017 Projections contemplated 22 openings during the same period. Responses to information requests during the trial preparation period indicated that the Company contemplated 3-5 new schools each year from FY2020 through FY2024. Professor Fischel countered in his Supplemental Report the responses to management questions were in fact framed to reflect current views of openings, qualified by statements about the uncertainties and that accordingly the July Model's forecasts could not be said to be incomplete. Professor Gompers accepted under cross-examination that the post-Valuation Date views of Management could not be used in a DCF calculation, but explained that he was simply relying on the responses to requests for information to explain why it seemed more reasonable to rely on the similar school openings numbers in the August 2017 Projections, which were far higher than the numbers in the July 26 2017 Model⁹³.
162. Despite the somewhat equivocal way in which Mr Halder asserted in evidence that the August 2017 Projections should be adjusted to include the China Bilingual 5 Year Forecast prepared by Mr Johnson and finalised on or about July 26, 2017, I find on balance that the latter document does reflect Management's revised and risk-weighted views as to expected future performance. Those views cannot be dismissed altogether on the grounds that it was incomplete. Moreover, as Professor Fischel rightly pointed out⁹⁴, although the July 26, 2017 Model's 'China Bilingual Schools Forecast 5 Year Summary' page reduced the projected number of schools, it still projected a substantial increase in capacity. That suggests a more balanced and considered assessment of future performance than is implied by looking solely at the number of schools. Moreover, it was clear from the terms of the response to the information request put to Professor Fischel by Mr Adkin QC in cross-examination, that the interviewed Company representative was only expressing hopes as opposed to expectations⁹⁵. This prompted Professor Fischel to observe: "*there is a difference between hopes and expects*".
163. In the end, the reliability of the competing valuation approaches to the China Bilingual project is best confirmed by cross-checking them through a broad-brush commercial judgment of the relative plausibility of the projected outcomes.

⁹² Paragraph 291.

⁹³ Transcript Day 10 page 5 line 15-page 6 line 14.

⁹⁴ Supplemental Report, paragraph 78.

⁹⁵ Transcript Day 8 page 3 line 4-page 5 line 11.



China Bilingual 5 Year Forecast: how much value?

164. The July 26, 2017 Model contemplates 6 new schools over the relevant period. Professor Gompers projects 22 based on the August 2017 Projections, and Professor Fischel projects 9 new schools (adding an additional 3 to the Company's adjusted Projections). Accepting that this approach is perhaps an overly conservative one, relative to the approach the Company generally adopted to preparing its forecasts, I prefer Professor Fischel's general approach on the grounds that there is no credible basis for continuing to rely on the August 2017 Projections as regards the expected number of schools. On balance I found Professor Fischel's approach to this issue, while conservative, to be more objective and commercially realistic than Professor Gompers' comparatively inflexible analysis.
165. The commercial result of Professor Gompers' approach to valuing the China Bilingual business, assigning US\$3 billion in value, was simply incredible. I accept the following assessment of the evidence on this point in the Company's Written Closing Submissions:

"141. The fact that the August 2017 Projections used by Professor Gompers in his DCF valuation were far too optimistic as regards China Bilingual was starkly revealed on Day 9. Professor Gompers was seemingly unaware {Day10/20:1} - {Day10/21:2} that the value attributed to China Bilingual in his valuation was approximately \$3 billion (\$29 per share); although he did not express any surprise at that figure {Day10/29:1-6}, he was wholly unable to explain how a business with a single operating school could be worth anything like that amount or to reconcile that figure to the \$1 billion market value of China Maple Leaf [Exhibit XIII-2 at {E/21}], one of Nord's closest competitors (per Professor Gompers Exhibit XIII-2 at {E/21/1}) (he agreed that was his description on Exhibit {Day10/34:9-17} although he backtracked on Day 12) and the owner and operator of 71 bilingual schools in China [HSD/1/147]. Subsequent attempts to compare an operator of schools, many of them not-for-profit schools, to Apple and the launch of a new iPhone did not enhance his credibility {Day10/88:1-18}. See also Qunar where the Dissenters' expert had valued the company at more than Expedia [{AB/8/33} paragraph 175]."

166. The attribution of US\$3 billion to China Bilingual by Professor Gompers was asserted by the Company's counsel in opening and not contradicted by Professor Gompers' expert.



cross-examination. It does not appear on the face of his Reports. It may well be that the \$3 billion figure is an extrapolation from Professor Gompers' \$1.454 billion "*Present Value of Incremental China Bilingual*". The latter figure formed part of a global total equity value of US\$8.1 billion (also presumably discounted to present value) which Professor Gompers used in his Expert Report to support a diluted share price of \$76.12⁹⁶. In any event I regard that global valuation, more than twice the Market Price and the Transaction Price, as inherently improbable, for reasons set out near the end of this Judgment.

167. That said, the unusual circumstances under which the China Bilingual 5 Year Forecast was prepared with the introduction for the first time of risk-weighting after the Merger Agreement had been consummated cannot be considered as having no impact on the reliability of the adjustments which Professor Fischel himself adopted. It is not necessary for me to decide whether the Company was engaging in sharp practice by trying to massage the estimation evidence in anticipation of the present litigation. It suffices to conclude that because the China Bilingual 5 Year Forecast was prepared on a more conservative basis than the August 2017 Projections, there is a risk that the former estimates are somewhat understated and a risk that the latter estimates are somewhat overstated.

China Bilingual: summary

168. In summary, I approve Professor Fischel's adjustments to the August 2017 Projections to take into account the China Bilingual 5 Year Projections. While it was unattractive for the Company to prepare for the first time risk-adjusted estimates for an important part of its business at the time when it did, I accept that overall the adjustments increased rather than decreased the reliability of the estimates. This is essentially because the revised estimates were based on far more relevant data.

DCF Methodology: overview

169. In his Expert Report, Professor Fischel opined as follows:

"62. A DCF analysis also requires an estimate of the 'terminal value'...The terminal value in a DCF is typically calculated using the "Gordon Growth Formula", under which the value of the company at the end of the explicit forecast period is equal to $FCF_{t+1}/(r-g)$, where ' FCF_{t+1} ' is the expected free cash flow in the first year after the end of the explicit forecast period, ' r ' is the discount rate, and ' g ' is the assumed annual growth rate of free-cash flows

⁹⁶ Expert Report, Exhibit XI-3A.



into perpetuity (which is commonly referred to as the 'perpetuity growth rate' or 'PGR').

63. Once the terminal value is estimated, it is discounted to present value and added to the estimated present value of the free cash flows in the explicit forecast period to estimate the value of the company's operating business. Then, the company's total enterprise value is estimated by adding the estimated value of cash and cash equivalents and non-operating assets (such as unconsolidated subsidiaries, and other equity investments) to the estimated value of the company's operations. The aggregate equity value of the company is estimated by subtracting the estimated value of debt and other non-equity claims from the estimated total enterprise value of the company. The value per share is estimated by dividing the aggregate equity value by the number of fully diluted shares outstanding."

170. Essentially the same methodology is described by Professor Gompers in paragraph 219 of his Expert Report. As indicated above, the Experts were agreed on the key elements of a DCF model.

The Bach Bank Model and other contemporaneous views on value

171. Professor Gompers carried out two DCF analyses, one based on the August 31, 2017 Projections and the other based on the Bach Bank Model prepared by Baring, not the Company's Management. In my judgment the Bank Model clearly cannot be used as the basis for a DCF valuation because, I find as a fact, despite the fact that it was prepared with input from the Company's Management, that it was not prepared in the ordinary course of the Company's business as a tool for predicting its future performance. I accept the evidence of Mr Halder in this regard. It seems obvious from all the relevant evidence that the Bank Model was used by Baring to raise financing in connection with the Merger Transaction and/or for monitoring the investment in the post-Merger period.
172. In section B of his Supplemental Report, Professor Fischel opines that the Bank Model projected how the Company would perform post-Merger. In addition, it was not a model prepared by Management even though it drew on information provided by Management. Professor Gompers in his Reports advances no convincing rationale for using the Bank Model as a basis for a DCF analysis.



173. Professor Gompers, and the Dissenters, placed considerable reliance on the views of Baring and various individuals connected with the Company to the general effect that the Shares were undervalued by the market and/or had an intrinsic value far higher than the Transaction Price. This evidence was used to support the credibility of the far higher DCF valuation contended for by Professor Gompers rather than the more modest range proposed by Professor Fischel. I do not find any credible support from such sources for a valuation at the remarkable level contended for by Professor Gompers. However I am bound to accept the following far more modest and factually supported argument advanced in the Dissenters' Written Closing Submissions, which does no more than to support in general terms the need to have regard to an appropriate DCF analysis:

"288. A telling way of testing whether DF's refusal to give any weight to a DCF analysis in this case is a reasonable and realistic one is to look at what the economic actors and other market participants did. When this is done, the picture is stark. All of the economic actors operating in the real world used a DCF analysis in seeking to establish the value of the Company and its shares, and every one of those DCF analyses showed the stock to be undervalued by the market. Conversely, not a single one of them adopted the approach used by DF and tested the efficiency of the market to arrive at the conclusion that the market price should be relied on."

174. I accept that the credibility of the Market Price, which was primarily relied upon by Professor Fischel as the best evidence of the fair value of the Shares, is materially undermined by the extent to which various players had recourse to DCF models. However I do not find that any of these comparatively informal analyses provides any meaningful support for Professor Gompers' ultimate US\$76.51 DCF valuation outcome.

Terminal Growth Rate "TGR"/Perpetuity Growth Rate ("PGR")

175. Professor Fischel explained his approach to terminal value in his Expert Report as follows:

"78. If the Company were to make replacement capital expenditures that sufficed to maintain the productive capacity of its assets but made no new capital investment, then the company's PGR would be equal to the long-run expected inflation rate, which was 1.81% as of August 1, 2017. In order to obtain a larger PGR, the Company would have to reinvest a portion of the after-tax operating profits it earns back into the Company."



and earn a positive return on that reinvestment. Therefore, the assumed PGR must be consistent with assumptions made about the amount of, and return on, new investments made in the terminal period.

79. I understand that Nord Anglia education's existing schools operate in competitive markets...Moreover, economic theory indicates that returns that exceed a company's costs of capital will be competed away over time. Accordingly, our DCF analysis assumes that Nord Anglia Education's rate of return on new investment capital ('RONIC') will be equal to its WACC during the terminal period. This assumption is consistent with the concept of a steady state. Under those circumstances, the amount of new capital investments would affect the expected PGR but would not affect the terminal value. Therefore, the results of our DCF analysis do not depend on the assumed amount of new capital investment in the terminal period." [Emphasis added]

176. In Appendix D, Professor Fischel explains in further detail how the projections are extended to reach steady-state. He adopts a 1.81% long-term growth rate (TGR or perpetuity growth rate) based on the rate projected in the Company's Adjusted August 2017 Projections for 2027, the last year of the main forecast period.
177. Professor Gompers in his Expert Report opined as follows:

"313. Steady state cash flows are cash flows generated after the explicit forecast period, once a company is in a steady-state growth period. It is generally assumed that, at some point, the company's cash flows follow a predictable, steady state pattern. This steady-state cash flow is used to calculate the value of the company, which is assumed to exist in perpetuity. Nevertheless, even though infinite life is assumed for the company, cash flows that occur far out in the future receive progressively less and less weight (the weights become closer and closer to zero as the horizon increases) due to the nature of discounting for time value of money and risk using the discount rate (WACC).

314. Overall, I take a conservative approach (resulting in a lower valuation) to the calculation of the steady-state cash flow. My approach is conservative because I assume that Nord Anglia will stop growing its footprint in the terminal period...This means that any growth in cash flow during the terminal period comes only from increases in tuition. This is conservative because, as discussed previously, Nord Anglia had a proven track record of identifying and completing value-enhancing acquisitions, and the Company expected to continue those acquisitions going forward...



343. *It is a common assumption in DCF valuation that the long-term growth rate for a company is expected to fall between the expected rate of inflation and the expected nominal GDP growth rate. Weighting the expected nominal GDP growth rates for 2022 in the countries in which Nord Anglia operated by the Company's last year of projected revenue in the August 2017 Projections and Bank Model in those countries yielded a weighted average expected nominal growth rate of 6.68% and 6.21% using the August 2017 Projections and Bank Model respectively. The growth rates I use are significantly below the GDP growth rates.*" [Emphasis added]

178. In his Supplemental Report, Professor Gompers further explained his approach as follows:

"247...the growth rate I use is equal to 1.5x the weighted average (by revenue) inflation rate for Nord Anglia, based on the Company's historical and targeted tuition fee increases at 1.5x to 2.x inflation. The August 2017 Projections and the Bank Model make different assumptions about the exact geographical mix of revenue for Nord Anglia in the future. Therefore, the weights associated with inflation in each country differ to the extent the geographical mix of revenue is different across these projections. As a result, a growth rate equal to 1.5x weighted average inflation rate will be different as well. This implies a long-term growth rate of 4.23% for the valuation using the August 2017 Projections and 3.99% for the valuation based on the Bank Model."

179. With the Dissenters' Expert propounding a long-term growth rate of 4.23%, more than twice the Company's Expert's 1.81%, Professor Fischel understandably strongly criticised the Gompers approach, invoking Professor Gompers' own writings in support of his analytical cause. In his Supplemental Report, Professor Fischel opined as follows:

"86...if the Company's tuition revenues were expected to grow at 1.5 times the local currency inflation rates of the countries in which the Company operates in, as Professor Gompers assumes, then the U.S. dollar value of the Company's tuition revenue would be expected to grow at 1.5 times the U.S. dollar inflation rate. As of August 1, 2017, the long-run expected U.S. dollar inflation rate was 1.81% 1.5 times that amount is 2.715%, not the 4.23% or 3.99% U.S. dollar growth rates that Professor Gompers assumed."



87. *Professor Gompers' assumption that the Company's long-term tuition growth rate would substantially exceed the expected inflation rate is also implausible...Moreover, in his recently published casebook, Professor Gompers states that '[w]e often assume...zero real growth in the future'. A zero real growth rate would imply a long-term nominal growth rate equal to the expected long-run inflation rate, or 1.81% in U.S. dollars, not the 4.23% or 3.99% growth rates that Professor Gompers assumes.*

88. *As Professor Gompers states in his recently published casebook, '[v]aluation[s] in which the terminal value represents a substantial majority of the value are likely to be very sensitive to small changes in growth rate assumptions'. That is precisely the case here, as terminal value represents approximately 94.1% of the Company's enterprise value in Professor Gompers' DCF analysis based on the August 2017 Projections and approximately 87.2% of the Company's enterprise value based on the Bank Model...."*

180. The differences between the Experts were summarised in the Dissenters' Written Closing Submissions as follows:

- (a) whether the growth rate should be at or above inflation;
- (b) what inflation rate should be used; and
- (c) whether return on capital will equal the cost of capital in the terminal period.

181. Professor Gompers persuasively argued (based on facts that I considered to be uncontroversial) that it was reasonable to assume that the Company's tuition fees would increase at 1.5 times the rate of inflation in the countries the Company did business in having regard to the profile of those countries, historic returns, the particular prospects of education as a vibrant (as opposed to dying industry) and taking into account that in reality the perpetuity period was only really taking into account 30-40 years. Under cross-examination by Mr Boulton QC, he admitted that the question of whether or not an assumption should be made that growth would be higher than inflation had significant financial consequences for the valuation question:

"Q. So if we remove the 1.5 times multiplier and simply use the weighted average inflation rate, your 4.23 per cent



would go down to 2.82 per cent. Is that right?

A. Correct.

Q. Let's insert that at B45, simply to see the sensitivity that arises from that assumption. 2.82 per cent, please, operator. \$54.10. So something like \$21 of value arises simply from an assumption that the company for ever more will be able to increase its tuition fees at 1.5 times the rate. I think that may be an underestimate.⁹⁷

182. In my judgment Professor Fischel's assumptions, which align with the economic theory which predicts a loss of competitive advantage over time, and take into account the sensitivity of the valuation to minor changes in growth rates in cases such as the present, are more reasonable overall. I reject Professor Gompers' approach of applying a 1.5 multiplier to the inflation rate on the basis that I find that it is based on an optimistic view of the Company's long-term fee-generating capacity with insufficient consideration being given to downside risks.
183. What should the terminal growth rate be? Professor Fischel in his Supplemental Report did not appear to me to challenge Professor Gompers' view that the terminal growth rate should ordinarily be somewhere between the inflation rate and GDP. Mr Boulton QC also appeared to accept Professor Gompers' position on the latter issue in cross-examination⁹⁸. The main justification Professor Gompers advanced for going above the inflation rate was applying the 1.5 multiplier based on an assumed 1.5% fee increase through the terminal period. The main challenge put to the Dissenters' Expert on this point, as already noted, was that his general approach was simply inherently unrealistic:

*"Q. Do you not find it worrying that half of your value turns on a debate about whether one should be using a US inflation rate or 1.5 times local inflation rates in a period that starts ten years from now?
A. So does it concern me? It certainly -- I certainly think about it. It doesn't change my opinion. I think -- as I mentioned earlier, the cash flows that Professor Fischel and I get are sort of reasonably close. I think the important issues for this court to think about is what is that long run terminal growth rate, as well as the discount rate, which I'm sure we will have a discussion, but I agree with you that if you change the long run terminal growth rate to 1.81 per cent, which I think is absolutely wrong, it causes the value to fall by nearly half."*

⁹⁷ Transcript Day 10 page 123 line 25–page 124 line 3.

⁹⁸ Transcript Day 9 page 105 lines 9–15.



184. The Dissenters in their Written Closing Submissions also relied on representations made by the Company to Houlihan Lokey about the terminal growth rate which were seemingly accepted by the advisers to the Special Committee:

“432. Importantly, in the context of the take-private, the Company told Houlihan Lokey, as advisors to the Special Committee, that tuition in the steady state would grow at 1-2% above inflation. This representation was not simply directed at the immediate future, but at the terminal period...”

433. Houlihan Lokey relied on that message in the presentation they gave to the meeting of the Special Committee on 24 April 2017 and then to the Company’s Board at their meeting on 25 April 2017, a presentation which came to be filed with the Proxy. Houlihan Lokey included a sensitivity table showing equity values at different discount rates and TGRs. The alternative TGRs in the steady state were 3.50%, 3.75% and 4.00%. Footnote 4 on that page makes clear that ‘revenue growth [was] based on information provided by Company management’.”

185. This submission does not support Professor Gompers’ use of a growth rate above the rate of inflation because, whatever growth rate Houlihan Lokey used for their DCF analysis, it produced a range of values far closer to Professor Fischel’s valuation results than to Professor Gompers’. I accordingly approve the use of the [US\$] long-term inflation rate of 1.81% as the terminal growth rate because on a balance of probabilities it appears to me to be based on the most reasonable assumptions it is possible in all the circumstances to fairly make.
186. The Dissenters finally complain that Professor Fischel’s assumption that the Company will make new investment in the terminal period but that any return on investment will not exceed the cost of capital to be “extraordinary”. As Professor Gompers assumes no growth in the terminal period at all, the practical valuation result appears to be the same, albeit via different analytical routes. In these circumstances I see no need to decide to prefer either approach, being firmly of the view that no justification exists for a terminal growth rate above the long-term inflation rate.
187. In summary, I approve the terminal growth rate of 1.81% as proposed by Professor Fischel in his Supplemental Report].



Cost of equity: Capital Asset Pricing Model (“CAPM”)

188. Both Experts used the Capital Asset Pricing Model (“CAPM”) to calculate the Company’s cost of equity. The formula used is the risk-free rate of interest + the *beta* x the equity risk premium. The formula is mathematically expressed as *cost of equity* = $R_f + \beta \times ERP$. The main dispute at trial was the appropriate *beta*, the appropriate risk-free rate of interest and the equity risk premium being agreed.

Cost of equity: the appropriate discount rate and “beta”**Overview**

189. The Company submitted that using Professor Fischel’s *beta* number “in Professor Gompers’s August 2017 DCF calculation would reduce his share price from \$75.21 to \$51.69”⁹⁹. So I cannot ignore the fact that what appears to be a narrow technical dispute is nonetheless in commercial terms a “big ticket item”. Identifying an appropriate *beta* is the first step in calculating the actual discount rate which is designed to determine the present value of the Shares based on an assessment of the likely future cash flows.
190. Professor Fischel in his Expert Report described the function of the discount rate in a DCF analysis as follows:

“61. A DCF analysis is a method of estimating the value of an asset (i.e., what a willing buyer would pay a willing seller for that asset). In a typical DCF analysis, the expected stream of free cash flow available to investors in the company (i.e., equity holders, debt holders and any other nonequity investors) for an explicit forecast period (e.g., five years) is discounted to present value using an appropriate discount rate in the first stage. The discount rate in a DCF analysis is calculated using a company’s weighted average costs of capital (‘WACC’), which represents the opportunity costs of capital of investors in the company. As suggested by its name, the WACC is a weighted average of the company’s cost of equity and its cost of debt, where the weights are based on the share of each type of capital in the company’s capital structure.”

191. Professor Gompers in his Expert Report opined as follows:

“215. One of the central tenets of modern finance is that the value of an asset, such as a share in a company, is equal to the discounted value of an asset’s expected after-tax cash flows. A valuation textbook notes that DCF valuation is ‘the foundation on which all other valuation approaches are built.’ In the

⁹⁹ Company’s Written Closing Submissions, paragraph 131.4.



present circumstances, the objective is the calculation of the fair value of the Dissenters' shares in Nord Anglia. Because shares are claims on the value of an underlying company (equity being a residual claim after debt holders have been paid), the starting point in valuing shares is the overall value of the company as a standalone entity, which is then adjusted to account for outstanding debt. The residual value is then divided by the number of shares outstanding to arrive at the per share valuation."

192. It is helpful to bear these uncontroversial statements of basic principles in mind when considering the controversial elements of their application to the facts of the present case. The dispute on the calculation of the discount rate ultimately involves a choice between Professor Gompers' lower 1.1% figure which resulted in a WACC of 8.23% (without a size premium) and Professor Fischel's 1.3% rate, which produced a WACC ranging from 8.98% (without a country risk premium or a size premium) to 10.90% (with both such premiums taken into account). Accordingly, the most significant threshold dispute in relation to the DCF analysis is how *beta* should be calculated. The two main disputes were:

- (a) what weekly data should be used for computing the beta; and
- (b) whether the resultant beta figure should be adjusted downwards using what is known as a 'Blume adjustment'.

The correct approach to weekly data

193. In the Company's Written Closing Submissions, its position on the weekly data issue was summarised as follows:

"146 The textbooks show that beta is commonly estimated using either two years of weekly returns or five years of monthly returns (Damodaran on Investment Valuation at {G/85/84}). There is a trade-off between obtaining more data points and going further back before the Valuation Date, in which case there it is more likely that the risk profile of the company will have changed.

147 In this case, Professor Fischel has estimated Nord's beta using weekly returns (Friday to Friday) for the two year period before the Announcement Date, regressed against the S&P 500:

147.1 Nord had only been public for three years and therefore it would not have been possible to use five years of monthly data;

147.2 Professor Fischel's approach is wholly consistent with the default approach taken by Bloomberg and many other data providers (whose business is to provide this sort of data to their clients);



147.3 Professor Fischel's approach is therefore entirely normal and it cannot be suggested (and was not suggested) that he was in any way influenced by what the raw data shows.

148 Professor Gompers, in contrast, has adopted an approach of his own devising which he has not previously used and which is not the subject of any academic literature {Day 10/164} and {Day 10/166}. (The Dissenters sought for the first time in re-examination to suggest that Mr Osborne had applied the same method in Qunar, but a "five day trailing average" is not the same approach as adopted by Professor Gompers. Further it is a remarkable coincidence that these two "innovative" approaches were used by independent experts on behalf of the same clients in s.238 proceedings, and the court is respectfully asked to be sceptical about their provenance)."

194. In the Dissenters' Written Closing Submissions, the following contrary case was advanced:

"339. It follows that the principal differences between the Experts relate to (i) the length of the estimation period and (ii) how to use the weekly data. PG uses as much of the available data as possible in order to reduce estimation error in his regression analysis. He then cross-checked his result against other methods of arriving at beta. By contrast, DF appears to have selected a series of simplified parameters, each of which serve to increase the beta; he did not cross-check his beta against any other results.

340. PG's approach should be adopted as the empirically rigorous approach, which has support in the academic literature. Despite DF's suggestions to the contrary, DF's approach is not recommended in any of the material before the Court.

The Experts' approaches to beta

341. PG arrived at his beta of 1.04 in a scientific way, as follows:

341.1. He chose the longest possible period for the comparison between the volatility of returns of the Company's stock, as compared to a stock index, from 22 September 2014 to 24 April 2017 (a period of 2.6 years). This is the longest period of time because it includes all available weekly return data for the Company up until the last day prior to the Merger Announcement, with the exception of the first 180 days after the Company's IPO which were excluded due to potential anomalous trading behaviour during this period which has been documented in finance academic literature.

341.2. As an index, he chose his return data from the broad CRSP value weighted NYSE/AMEX/Nasdaq/ARCA return index. However, he also cross-checked this against the S&P 500 returns, which was the index used



by DF. In any event, the Experts agree that in this case their different choice of index makes no material difference.

341.3. PG observed the weekly returns for each day of the week (Monday-to-Monday, Tuesday-to-Tuesday, Wednesday-to-Wednesday, Thursday-to-Thursday, and Friday-to-Friday) against the index returns, and carried out five separate regression studies resulting in 5 separate results: for these the lowest was 0.97 (with two others at 0.98 and 0.99), and the highest was 1.24. He averaged the 5 (see rows 41 to 45 in column c of the summary sheet tab/spreadsheet in exhibit A-1 (E/23)) to reduce estimation error. This is a case of using more data when available, but without the risk attendant on taking data from periods in the more remote past.

341.4. He applied a Blume adjustment because computing the cost of equity is forward-looking, and the derivation from past returns is backwards looking. The Blume adjustment (which can be compared with the smoothing adjustment made by Bloomberg) produced an adjusted beta of 1.04 (equivalent to the relevered beta of 1.01).

341.5. PG compared his beta of 1.01 against the results that are produced by other recognized methodologies used to arrive at beta 198. In particular, he crosschecked and found his beta consistent with (1) the beta produced by Barra Inc (0.88), (2) betas applied by analysts covering Nord in 2017 (typically around 1.00), and (3) three US-traded (that is NYSE-listed) companies in the same education sector as the Company, viz. Bright Horizons, New Oriental, and TAL Education. He also used as a comparator the Fama-French Three Factor Model using two different ways of using that model to calculate the cost of equity –both of which produced a lower cost of equity (9.35% and 8.67% respectively) than his use of the CAPM with a historical adjusted beta 201.

342. DF estimated the Company's beta to be 1.30. He did so simply by taking returns from Friday-to-Friday, with weekly intervals, and using an estimation period of 2 years. He did not take into account the 2-year weekly results of any other day of the week. He did not take into account the data available over the longer period used by PG, viz. 2.6 years. He performed no cross-check, whether against other methodologies or contemporaneous estimates of beta, when arriving at his beta. He rejected his own 3 year study, used when estimating volatility in the context of his event study, to come up with the highest beta possible. DF's beta should be rejected

343. DF's beta should be rejected for the following reasons. First, he has selected Friday-to-Friday, which yields the highest beta, for no principled reason and without advancing any academic text that recommends such an approach. Second, he has chosen to limit the estimation period to 2 years, when 2.6 years of data is available and can and should be used because it reduces estimation error. Third, he has not cross-checked his beta against betas derived from any other methodologies, and a cross-check reveals that DF's beta is an outlier.



345. *By choosing only to use Friday-to-Friday data, DF has arbitrarily excluded data which could be taken into account in arriving at beta, and which should be taken into account in order to reduce estimation error. As PG says, "There is no basis in economic theory to prefer any one seven-day period vs. another, because all the estimates are estimates of the same quantity – beta. Therefore, the appropriate approach would be to minimize estimation error, which is what I have done."*

195. I found this issue difficult to initially evaluate as, bearing in mind the broad consensus between the Experts on many technical matters, it seemed somewhat surprising that they should each contend that the other was adopting an approach wholly unsupported by academic literature. The first question seems to me to be whether it matters which seven day period one uses. Professor Fischel, under cross-examination by Mr Bompas QC, initially asserted that there was no logical basis for different results over different seven day periods and so any differences should be disregarded. He stated that the Bloomberg approach of Friday to Friday was standard and there was no support for Professor Gompers' averaging approach¹⁰⁰. When it was suggested that in fact using different weekly periods yielded different results (and his Friday to Friday period happened to generate a higher *beta* in this case), Professor Fischel insisted that such differences should be disregarded rather than taken into account, because the differences made no sense¹⁰¹.
196. Professor Gompers under cross-examination by Mr Boulton QC admitted that his using different days of the week and averaging was not a widely-used approach to calculating *beta*. He also admitted that he was unaware of any academic support for what was effectively a novel approach:

"Q. Let's see how you describe what you've done and I'm going to come on to this averaging of five sets of weekly returns.

Let's go to {HSD/1/162}. You explain here that you obtained an average historical beta across days of the week and you say in the last sentence of 435:

"There is no strong theoretical basis to prefer any one seven-day period versus another."

You are stating that because you are aware that what you've done by averaging the five days of the week is highly unusual, aren't you?

A. So I would -- highly unusual. So what I would say is that it's not employed by numerous people, but it is the

¹⁰⁰ Transcript Day 8, page 52 line 3-page 54 line 15.

¹⁰¹ Transcript Day 8 page 55 line 22-page 57 line 1.



correct way to do it, and, in fact, in revisions of my own work, I'm now stating that one should look at this, for the following reason, which is —

Q. I'll come on to ask you about why.

A. I would really like to finish this answer, sir. I was in the middle of it. And the reason that's the case is just what we were talking about earlier, which is that betas are estimated with error. And, in fact, I talk in my chapter, which we talked about earlier, that when you estimate betas, you would like to have as many different ways to cross-check it as possible. Perhaps the ideal way to cross-check it is with the exact same company. So the company returns for Nord Friday to Friday can be cross-checked by the Nord returns Wednesday to Wednesday, Tuesday to Tuesday. So the cross-checking it there makes a lot of sense. By averaging across all of these observations, we are actually reducing the standard errors around the beta because we have multiple draws. And therefore, averaging it gives us a much better estimate and reduces the error around our estimate of beta. We get a better estimate of beta....

Q. So beta has been commonly used for, what, 50 years or so, Professor?

A. Yes.

Q. And in those 50 years, where we have seen extensive research into beta, no one -- and I'm putting to you this -- no one has ever written an article or any other publication that suggests that one should average five sets of weekly returns. That is right, isn't it?

A. I'm not sure that that would be a topic for an academic journal, but certainly it is the case that if one thinks a priori from both a theoretical and an empirical point of view --

Q. Sorry, let me have an answer to the question before we have another lecture. That is right, isn't it?

A. I have not seen such an article but, as a tenured finance professor at Harvard Business School, who has written extensively on the topic, one wants to triangulate the cost of capital to make sure that you have the right number in this case, there is no reason not to use a beta on another day. Therefore, it makes sense that averaging would give us a better estimate of



what the beta is."¹⁰²

197. In the course of the hearing I saw more immediate logic to Professor Gompers' approach to taking steps, as it were, to neutralize randomness than in Professor Fischel's contention that random differences in weekly data depending on the last week day chosen should be ignored. On reflection, however, it is difficult to avoid drawing the inference that Professor Gompers' innovative and elaborate approach to calculating *beta* in this case would not have been deployed if the Friday to Friday data generated by Bloomberg had not happened to produce a higher figure than the average of data for weeks ending on other days of the week. He used data published by the Center for Research in Security Prices ("CRSP"), which itself provided data for the last day of the week (like Bloomberg) and indicated a *beta* figure of 1.24, far closer to the Bloomberg figure than the weekly average the Dissenters' Expert calculated for himself. Professor Fischel also suggested that the use of the CRSP figures reflecting a combination of exchanges rather than the S&P 500 market proxy he used was unusual, but had no material impact on the result in the present case¹⁰³.
198. I accept the approach of Professor Fischel which I find to be more orthodox and straightforward and I approve his adoption of a *beta* of 1.3 subject to deciding whether or not a 'Blume adjustment' is required.

The need for a 'Blume adjustment'

199. Professor Gompers in his Expert Report explained why such an adjustment was in his view required:

"436...I next computed Nord Anglia's CAPM historical adjusted beta by applying a two-thirds weight to the average CAPM historical beta of 1.06 and a one-third weight to the market beta of 1.00. This adjustment is consistent with Bloomberg's beta calculation methodology, and it accounts for the expected future movement of betas towards a value of one (which has been empirically documented in the academic literature by the economist Marshall Blume), and is consistent with the notion of computing the cost of equity in a forward looking context. The adjustment yielded a CAPM adjusted beta of 1.04 based on the historical beta estimate of 1.06..."

200. Professor Fischel in his Supplemental Report firstly questions the support provided by an article Professor Gompers relies on to justify this approach¹⁰⁴. He then proceeds in

¹⁰² Transcript Day 10 page 159 line 21 —page 161 line 4; page 164 line 8-165 line 4.

¹⁰³ Supplemental Report, page 84 note 261.

¹⁰⁴ Robert C Klemkosky and John D. Martin, 'The Adjustment of Beta Forecasts', 30 The Journal of Finance (1975) 1123-1128.



the same paragraph to justify not applying the Blume adjustment on the following grounds:

"93...Blume's explanation does not support adjusting the Company's historical beta downwards (as Professor Gompers does) because the Company's new projects (i.e., new China Bilingual schools) are likely to be riskier than its existing projects (i.e., established premium international schools)."

201. I found that Professor Fischel's criticism of Professor Gompers for relying on the Klemkosky and Martin article was effectively neutralised by Mr Bompas QC in cross-examination¹⁰⁵. Professor Fischel agreed that he had not proffered the reason he advanced in his Supplemental Report for using an unadjusted historical *beta*. This was in part, he explained, because in his view it is more usual to use an unadjusted *beta* than an adjusted *beta*¹⁰⁶. As regards his opinion that the Company's future risk profile was a circumstance which justified not making an adjustment to the historic *beta* figure, the following critical cross-examination took place:

*"Q. And when you are arriving at your beta, what you are looking for...I mean, you can perhaps explain the difference to me. What you are looking for is systematic risk, not idiosyncratic risk. Idiosyncratic risk is the particular risk to do with the company. A systematic risk is really a more general correlation between the company and the area in which it works. Q is that fair?
A. That's fair.
Q. So that the idiosyncratic risk shouldn't be relevant for the point at hand.
A. It may or may not be."*¹⁰⁷

202. I reject Professor Fischel's argument that no 'Blume adjustment' is required because of the Company's idiosyncratic future risk profile. It remains to consider whether he is nonetheless right that, in effect, it is for the person contending for an adjustment to the historic *beta* (Professor Gompers in this case) to justify the need for an adjustment, because the need for such an adjustment is the exception rather than the norm. Mr

¹⁰⁵ Transcript Day 8 page 72 line 23–page 77 line 15.

¹⁰⁶ Transcript Day 8 page 79 line 25–page 80 line 5.

¹⁰⁷ Transcript Day 8 page 81 line 23–page 82 line 9



Boulton QC carefully explored the underlying rationale for the 'Blume adjustment' a few days later in his cross-examination of Professor Gompers¹⁰⁸:

"Q. Let's look at what Marshall Blume himself said. Let's go to {F/10/1}. This is an article that you cite. So you can see it's 'Betas and Their Regression Tendencies' by Marshall E Blume. This is from 1975. If we go to page 2, first paragraph: {F/10/2}

'A previous study showed that estimated beta co-efficients, at least in the context of a portfolio of a large number of securities, were relatively stationary over time. Nonetheless, there was a consistent tendency for a portfolio with either an extremely low or high estimated beta in one period to have a less extreme beta as estimated in the next period. In other words, estimated betas exhibited in that article a tendency to regress towards the grand mean of all betas, namely one.'

Q. Is the whole market, Professor?

A. You read that quite well, yes.

Q. And this consistent tendency that Marshall Blume refers to is in respect of either an extremely low or a high estimated beta. That's right, isn't it?

A. That's what at least this is talking about, the beginning of the paragraph, yes.

Q. And your average beta of 1.06 before a Blume adjustment would not fit the definition of extremely high or extremely low, would it?

A. It's close to 1.

Q. I take it that's a yes, you are agreeing with my question?

A. Yes.

Q. And this article by the man behind the Blume adjustment, as we might say, goes on to examine why this might be the case. And we can see this at page 11. {F/10/11}. Picking it up, I think, at the bottom of the page, in the summary:

'In other words, companies of extreme risk -- either high or low -- tend to have less extreme risk characteristics over time. There are two logical

¹⁰⁸ Transcript Day 10 page 176 line 7-page 178 line 24.



explanations. First, the risk of existing projects may tend to become less extreme over time. This explanation may be plausible for high risk firms, but it would not seem applicable to low risk firms.'

There is no suggestion that that first logical explanation would apply in respect of a beta of 1.06 for Nord, is there?

A. I don't quite know what you mean. Remember, we are measuring this off into the future. And again, it might be the case, but the first explanation is about the nature -- he is offering us one potential theory that the projects are closer to -- are less risky than the rest of the firm.

Q. Yes. Well, and his second explanation, which I think you are touching on there, is:

'... new projects taken on by firms may tend to have less extreme risk characteristics than existing projects.'

So those are his two explanations. Neither of those could be said to apply to Nord in such a way that you would feel it necessary to apply a Blume adjustment from 1.06 towards the market beta of 1. They just don't apply in this context, do they?

A. Again, I would think perhaps in the very long run, if we think about the beta, they might, and, as I said -- he doesn't talk about it in this paper, but it's certainly the case that others have talked about the idea that, given measurement error, a beta above 1 has the potential to be above 1, just because of noise in the data, and similarly below 1. And that clearly could apply here."

203. Professor Gompers was unable to convincingly refute the proposition, based on the writings of Marshall Blume himself, that the rationale for the Blume adjustment is to neutralize the effects over time of "extremely low or high estimated beta" based on data that showed that such extreme historic figures usually normalised over long periods of time¹⁰⁹. This provides a coherent explanation as to why Professor Fischel did not feel the need to justify not using a 'Blume adjustment' in his DCF analysis and regarded recourse to the technique as more the exception than the rule. I find this dispositive of the issue.

¹⁰⁹ Transcript Day 10 page 176 line 24 – page 178 line 24.



204. Accordingly, I find that no Blume adjustment should be applied to the historic *beta* figure calculated by Professor Fischel (based on, *inter alia*, the two year period he justifies in paragraph 91 of his Supplemental Report) of 1.30.

Country Risk and/or Size Premiums?

205. Professor Fischel's cost of equity calculation was done with only an "Equity Risk Premium" (10.28%), with only an additional "Size Premium" (11.79%), with only an additional "Country Risk Premium" (11.38%) and with both additional premiums (12.89%). However, in his Expert Report, he fairly admitted that both the Size Premium and Country Risk Premium were controversial and essentially left it to the Court to decide¹¹⁰. The Experts disagreed on the need for a Country Risk Premium but ultimately agreed on a Country Risk Premium Rate (if applicable) of 1.1%. Professor Gompers in his Supplemental Report argued against a Size Premium, in part citing Professor Fischel's acknowledgment that the application of a Size Premium is controversial and in part opining that the real question was whether account had to be taken of any specific size risk factors¹¹¹. Under cross-examination by Mr Bompas QC, Professor Fischel made no real attempt to persuade that the Court that a Size Premium was required on the facts of the present case:

"A. No, here is the difference. He -- I think we both agree that there is a debate that the finance literature, to quote Professor Gompers, is inconclusive, that the academic -- the modern academic literature has been more critical of the existence of a size premium than was earlier the case. Practitioners, however, continue to use a size premium, and that's really the state-of-the-art, as it exists today, and I think Professor Gompers and I agree completely on that's the state-of-the-art.

*Professor Gompers took that present state of knowledge and decided a size premium was not appropriate, and I took the same thing and said there is no consensus, so, therefore, I calculated a cost of equity with and without a size premium and reported the results in my report."*¹¹²

206. This answer did not really engage with the true extent to which Professor Gompers in his Supplemental Report took issue with the general principle of a Size Premium, the very existence of which Professor Fischel himself acknowledged in his own Expert

¹¹⁰ Paragraphs 73-75.

¹¹¹ Paragraphs 324-328.

¹¹² Transcript Day 8 page 28 lines 7-22.



Report was in doubt. I find that the case for the inclusion of a Size Premium in the costs of equity calculation has not been made out. Because of the predominant reliance I have decided to place on the DCF methodology of Professor Fischel, and having regard to my general sense of the appropriate ultimate fair value result, I find that no Country Risk Premium should be applied either. Professor Fischel opined that academic doubt existed about both forms of premium and I am not persuaded that they are appropriate to be used within the framework of the model that he constructed, Professor Gompers' "agreement" on the need for a Country Risk Premium notwithstanding

Cost of debt

207. Professor Fischel in his Supplemental Report opined as follows:

"95. Both Professor Gompers and I noted that Moody's Investors Service had assigned Nord Anglia Education a long-term corporate debt rating of B1 and Standard & Poor's had assigned the Company a corporate credit rating of B before the Announcement Date, and, for that reason, we both estimated the Company's cost of debt based on the yield of corporate debt issued by companies with approximately the same debt rating. However, Professor Gompers used the effective yield of the ICE BofAML U.S. High Yield Index, which was 5.80% as of the Valuation date, whereas I used the effective yield of the ICE BofAML 10+ Year Single B U.S. High Yield Index, which was 8.15% as of the Valuation date, a difference of 2.358%...

96.... In other words, Professor Gompers used an index comprised of below investment grade securities with remaining maturities of one year or more, whereas I used an index comprised of bonds rated B1 to B3 with remaining maturities of ten years or more...

97. Because 'it is important to attempt to match the time period during which the cash flows are expected with that of the risk-free rate,' Professor Gompers used the 'yield on long-term U.S. Treasury Bonds' in his calculation of the costs of equity. For the same reason, Professor Gompers should have used a long-term corporate debt rate to calculate the cost of debt...Because Professor Gompers used an index that included intermediate term debt with maturities of one to ten years, not just long-term debt with maturities of 10 years or more, he substantially understated the Company's pre-tax cost of debts."

208. Professor Gompers countered in his Supplemental Report that his own 5.80% Cost of Debt figure was more reasonable than Professor Fischel's 8.16% for the following key reasons:



- (a) the "Fischel Bond Index" included only 26 bonds, 18 of which (69%) were either energy or retail companies. The "Gompers Bond Index" covered 731 bonds across 18 industries and was less biased;
- (b) the average years to maturity for the Company's existing debt was only five years, which was closer to the six year average in the Gompers Bond Index; and
- (c) the Gompers 5.80% figure was closer to the Company's historical cost of debt (5.88% at year-end 2015 and 6.88% per the May 31, 2017 audited financial statements). Professor Gompers' figure was higher than the corresponding rate used by Houlihan Lokey in its fairness opinion (4.90%), a Goldman Sachs valuation (5.00%) and closer to the 6.20% used in the Project Bach Model than Professor Fischel's estimate¹¹³.

209. Professor Gompers dealt with this aspect of his cross-examination in, at first blush, a convincing manner. He explained that the Cost of Equity was a long-term claim ("forever") and it was therefore appropriate to match it with the cost of long-term risk-free investment. The relevant criterion when assessing the Cost of Debt was assessing what the duration of the Company's debt was likely to be. The Company's borrowing had been and was likely to be for no more than 5 years, so his chosen Index (covering bonds with an average 5 year term) was more appropriate than Professor Fischel's. However, on reflection, the dismissive assertion that different periods of time logically applied when measuring the Cost of Debt and the Cost of Equity for the purposes of a DCF analysis did not deliver a knock-out blow to Professor Fischel's insistency that the temporal element of equity and debt should be the same¹¹⁴:

"Q. What you do disagree with then is if the average long-term debt of Nord was, say, six years or seven years, you would say that's too short?

A. Yes, if you are trying to match the length of time for cost of debt, for example, to the length of time that you are using for a risk-free rate, where Professor Gompers and I both used 20 years, I would not use six years, if you are trying to match 20 years or longer because of the nature of a discounted cashflow model."

210. Professor Fischel relied on two sources of support for his conclusion in his Supplemental Report. The first was Shannon P. Pratt and Roger Grabowski, *Cost of Capital, Applications and Examples* (5th Ed., John Wiley & Sons, Inc, 2014) at 1206-

¹¹³ Paragraphs 318-321.

¹¹⁴ Transcript Day 8 page 103 lines 8-17.



1207. The relevant passage (only partially reproduced in the Supplemental Report¹¹⁵) reads as follows:

“...But many companies have taken advantage of low short-term interest rates and have borrowed short term for long periods of time. The cost of debt capital should reflect the expected average of interest rates over a long period of time. If the current yield curve is upward sloping...that indicates that future interest rates are likely to be higher than current short-term rates. You should consider using the long-term equivalent interest for bonds that would be comparably rated to the subject company...” [Emphasis added]

211. The quoted text supports the use of long-term rates, but only if there is a basis for believing that borrowing costs will likely rise over the long-term. It clearly suggests that the aim of the calculation is to predict what the actual likely borrowing costs will be over a long period of time; not that long-term borrowing costs should be applied to a company which is only likely to borrow on a short-term basis indefinitely into the future. I find the idea that one calculates the cost of debt over the period of predicted cash flows by reference to what the relevant borrowing costs are likely to be to be entirely consistent with the dominant aims of the valuation exercise. Using long-term debt rates simply because the relevant period is a long one makes no obvious sense.
212. The second passage relied upon by Professor Fischel, from Aswath Damodaran, ‘*Damodaran on Valuation*’ (2nd Ed., John Wiley & Sons, Inc., 2006) at page 65, does not provide any clear support for the relevant Expert opinion either. It supports the approach of using the rates of similarly rated widely traded bonds, but also suggests that “*recent borrowing spreads [may be used] to come up with a cost of debt*”. It is common ground that similarly rated and widely traded bonds may be used; but only Professor Gompers contends that it is desirable to match the indexed debt term with the actual debt term the Company has in the past used and is likely to use well into the future.
213. In the Company’s Written Closing Submissions, the case on cost of debt was summarised as follows:

“165. The other component of WACC is the cost of debt. Here the difference between the experts boils down to whether it is appropriate to estimate Nord’s cost of debt for inclusion in WACC on the basis of the short term or long term cost of debt. Professor Fischel says that it is appropriate to use the long term cost of debt, because this matches the time horizon of the cash flows to be discounted and is also consistent with the experts’ approach to the risk free rate (based on a 20 year government bond): {E/58.1/93} at paragraph 97. Professor Gompers uses the short term cost of debt which he said (incorrectly) matched

¹¹⁵ Page 90 footnote 285.



the duration of the Company's existing debt: {E/72.1/115} at paragraph 320. Professor Fischel therefore derived his rate from bonds of 10+ years {HSD/3/67}; Professor Gompers used the same index but included all bonds {HSD/1/171}. As was put to Professor Gompers in cross-examination, this is like measuring the height of everyone in the room to estimate the height of the women in the room; {Day12/54:25} - {Day12/55:3}."

214. I am unable to accept this submission. The evidence of Professor Gompers and the submissions of the Dissenters on this issue (i.e. whether future borrowing costs should be estimated based on the term of the loans the Company is likely to be subject to rather than the long-term nature of the estimation period) are far more cogent and coherent overall. In the Dissenters' Written Closing Submissions, in addition to pointing out that Professor Fischel's choice of index is unsupported by the academic materials he relies upon, they make the following central point:

"398. What is relevant is matching the maturity of the debt issued by the Company: '... the debt rate you want has to match up to the maturity and the type of debt that the company has'. The Gompers Bond Index is consistent with the maturity profile of the Company's actual long-term debt, which was approximately five years as of the announcement of the Merger; conversely the Fischel Bond Index is not comparable. The Company never issued debt with a maturity close to the average maturities in the Fischel Bond Index. That is unsurprising, given that a company can roll over maturing debt in the future, with the result that the maturities of its debt profile remain the same."

215. I do accept the principle (explicitly supported by Shannon P. Pratt and Roger Grabowski, *Cost of Capital, Applications and Examples*) that if there is evidence that borrowing rates are likely to rise, that increase should be taken into account. The object of the exercise is to estimate the likely costs of debt for the subject company over the same period of time projected for estimating cash flows (perpetuity). However, Professor Fischel did not point to any such general market evidence. Under cross-examination by Mr Bompas QC, he agreed that he had possibly himself in previous cases calculated the cost of debt by reference to a company's historical borrowing costs¹¹⁶. Accordingly, while I prefer Professor Gompers' broad approach, and prefer his chosen Index to that of Professor Fischel's, I do not consider it appropriate to accept his chosen rate of 5.80% uncritically without comparing it with the historic borrowing cost position as he accepts it is appropriate to do.

216. Professor Gompers justified his figure in his Supplemental Report in the following way

¹¹⁶ Transcript Day 8, page 100 lines 16-19.



“321. Further, as explained in the Gompers Report, in addition to the estimate based on a ratings-based bond index, I also considered the cost of debt calculated based on the historical cost of debt disclosed in Nord Anglia’s financial statements and measured as interest expenses divided by the sum of long-term and short-term interest bearing debt. The historical cost of debt is 6.38% as of the most recent publicly available financial statements on May 31, 2017, and 5.88% as of fiscal year-end 2016 on August 31, 2016. Both estimates are significantly lower than the 8.16% used in the Fischel Report, and more consistent with the 5.8% used in the Gompers Report based on the bond index. Moreover, the costs of debt that I used in the Gompers Report is conservative compared to the estimates used in the Houlihan Lokey Fairness Opinion (4.9%) and in the valuation analysis by Goldman Sachs (5.00%), and broadly consistent with the cost of debt used in the Project Bach Model (6.20 %), all of which are lower than Professor Fischel’s estimate.

322. As an additional check on the appropriateness of the 5.80% cost of debt used in the Gompers Report, I examined the yield on Nord Anglia’s actual outstanding debt. Specifically, I calculated the weighted-average yield on Nord Anglia’s actual outstanding debt borrowings prior to the announcement of the Take-Private Transaction to be 5.21%. Therefore, the cost of debt used in the Gompers Report is well supported across a number of different sources, which are inconsistent with Professor Fischel’s estimate.”

217. Three points arise in relation to these opinions which I initially found problematic. First, the historical cost of debt figures derived from the Company’s audited accounts are described as “estimates”, which diminishes their significance. Calculations based on historic figures in audited financial statements of the Company ought, *prima facie*, to be accorded a higher evidential status than what are genuinely only estimates as to future debt costs. Secondly, Professor Gompers characterises his 5.80% figure as conservative relative to other economic actors (Houlihan Lokey and Goldman Sachs), but departs from his predominant stance of placing reliance on the Project Bach Model to justify his ultimate DCF result. In this instance, the Project Bach Model figure of 6.20% is closer to the May 31, 2017-based historic debt figure of 6.38%. And, thirdly, while Professor Gompers’ analysis cogently demonstrates that his index-derived cost of debt figure is closer to the Company’s historic cost of debt figures, the estimates of other market participants and, indeed, the costs of the Company’s existing outstanding debt, he does not really explicitly justify privileging a figure derived from generic data over Company-specific historic borrowing information.
218. Having considered substituting the historic costs of borrowing rate of 6.38% for Professor Gompers’ 5.80 % figure, I consider I should defer to the consensus between the Experts that the appropriate measure to use is a rate derived from an index of comparably rated stock. Reference to historic borrowing is clearly regarded by *Damodaran* as a default reference point where the stock is not rated at all. The learned author explains the functional reason why the cost of debt is calculated in the following way which is instructive to the uninitiated¹¹⁷:

¹¹⁷ *Damodaran on Valuation* (2nd Ed., John Wiley & Sons, Inc., 2006) at pages64 -65.



“The cost of debt measures the current cost to the firm of borrowing funds to finance its assets. In general terms, it should be a function of the default risk that investors perceive in the firm. As the perceived default risk increases, lenders will charge higher default spreads (on top of the risk-free rate) to lend to the firm...”

The most widely used measure of a firm’s default risk is its bond rating, which is generally assigned by an independent ratings agency. The two best known are Standard & Poors and Moody’s. Thousands of companies are rated by these two agencies, whose views carry significant weight with financial markets....

Many firms have bonds outstanding which do not trade on a regular basis. Since these firms are usually rated, we can estimate their costs of debt by using their ratings and associated default spreads... When there is no rating available to estimate the costs of debt, there are two alternatives:

I. Recent borrowing history...”

219. I accordingly approve Professor Gompers’ 5.80% cost of debt figure, which is a pre-tax figure. Applying the 31% statutory tax rate proposed by Professor Gompers and eventually agreed to by Professor Fischel¹¹⁸, to 5.80%, the post-tax cost of debt figure should be reduced to 4.00%.

WACC

220. I will leave the parties to calculate precisely what impact the cost of debt figure I have approved has on the WACC calculation which should in all other respects be performed using Professor Fischel’s figures. My own best efforts suggest a figure in the region of 8.7%.

Summary of findings on main DCF valuation issues in dispute

221. To summarise, I resolve the disputed DCF valuation issues as follows:

- (a) I approve Professor Fischel’s use of ‘Adjusted August 2017 Projections’ (taking into account the Company’s China Bilingual 5 Year Forecast);

¹¹⁸ Supplemental Report, paragraph 104.



- (b) I approve Professor Fischel's terminal growth rate of 1.81%;
- (c) I approve Professor Fischel's *beta* figure of 1.30 (with no Size Risk Premium or Country Risk Premium and without a 'Blume adjustment');
- (d) I approve Professor Gompers' (pre-tax) cost of debt figure of 5.8% which results in a post-tax figure of approximately 4%; and
- (e) I find as a result that the WACC must be reduced to a figure to be agreed between the parties, but which I very roughly estimate as being in the region of 8.7%.

222. It follows that the appropriate DCF valuation must be adjusted upwards applying the reduced WACC (in an amount to be calculated by the parties but which I estimate to be in the region of 8.7%) to Professor Fischel's valuation figures based on what he described as the Adjusted August 2017 Projections. I leave the parties to calculate the precise uplift which results from reducing the WACC from Professor Fischel's low of 8.98% which produced an equity value per Share of US\$41.32. My expectation is that this would result in a *pro rata* Share value in the region of US\$44.
223. Such a valuation falls just above the Houlihan Lokey DCF range and at the top of the Professor Fischel Reports range.
224. It now remains to determine what the fair value of the Dissenters' Shares should properly be, having regard to all the evidence, most notably the DCF valuation which I have just approved together with the Market Price and the Transaction Price.

FINDINGS: THE FAIR VALUE OF THE DISSENTERS' SHARES

225. Occasionally the critical issues in a case are best captured in one or two key submissions. In this case the overarching question in controversy was whether the Transaction Price or Merger Consideration of US\$32.50 had been undervalued by more than 50% because the true intrinsic value of the Shares was US\$76. In this case the best 'jury point' made on behalf of the Company came from Lord Grabiner QC, when he concluded his oral opening submissions as follows¹¹⁹:

"In conclusion, I just want to say as follows, that if Professor Gompers is correct, then a large number of people were wrong. The special committee, including its advisers, they were all wrong. The analysts who published contemporary views, they got it all wrong. A majority of the minority shareholders at the date of

¹¹⁹ Transcript Day 1 page 84 line 18-page 86 line 2.



the merger announcement -- they were people who either sold their shares or assented them to the merger -- they got it all wrong. The New York Stock Exchange and people investing on that exchange, they got it all wrong. Management who sold their shares, they were all wrong, which is interesting because they were insiders. CPPIB, the Canadians, which syndicated a proportion of the shares they had agreed to acquire in Nord, they got it all wrong, although they had done a good deal of their own scrutiny before coming to a decision as to whether or not to participate in the deal. Professor Fischel, he has got it all wrong -- but they would say he is parti pris but that will be a matter for your Lordship to decide. And then sophisticated investors, who had been, for example, in Fund IV -- and this is quite a nice point, that there were people who were investors in Funds III and IV, but in particular Fund IV, but who never came back for some more in Fund VI, which they were perfectly entitled to do, or would have been, but they, for some reason or another, decided that they would not participate in the post-merger syndication. These are very smart, sophisticated people. They obviously took the view that the kind of value that Professor Gompers suggests or contends for is simply not there. So essentially the whole world has got it wrong except for Professor Gompers. It's perfectly possible that he is right but in my respectful submission it is improbable in the extreme..."

226. The Dissenters, on the other hand, quoted from Oscar Wilde at the beginning of their Written Closing Submissions ("*A cynic is a man who knows the price of everything and the value of nothing*"¹²⁰) as a riposte to the Company's primary reliance on the Market Price as indicative of fair value. Mr Adkin QC in his opening oral submissions cogently advanced the Dissenters' own main jury point¹²¹:

"In this case, the majority shareholder, Baring, reached the well-informed view that the market significantly undervalued the shares in Nord and, quite lawfully, forced out the minority by way of a process in which it made clear that it would only sell its shares in the company to itself and its affiliates. Having done that, it has now performed, through the company it controls, a complete volte face and now

¹²⁰ '*Lady Windermere's Fan*'.

¹²¹ Transcript Day 1 page 99 line 19-page 100 line 9.



pretends to your Lordship, through the company, that the market got the value of the shares right all along and that the merger transaction was a sale process open to all which properly tested the market. This should be seen, we submit, for what it is, a piece of commercial opportunism, designed by Baring to play fast and loose with its obligation to pay fair value for what it has taken."

227. How I have evaluated these two seemingly starkly opposed views of the merits of the present case can perhaps be prefaced by reference to another Oscar Wilde quotation: *"the truth is seldom pure, and never simple"*¹²². As I have already indicated in recording my preliminary findings on the main controversial factual issues above, I have found merit in the main points advanced by both sides and essentially conclude that both sides are partly right and partly wrong, albeit leaning far more heavily towards the Company's proposed valuation outcome. In summary:

- (a) I accept the Company's broad submission that it simply beggars belief that the Sell Side acting as sophisticated investors would under-sell a valuable asset by more than 50%. There is no credible support for Professor Gompers' valuation of US \$76.51 as opposed to a Market Price of US\$30.45 and a Transaction Price of US\$32.50;
- (b) I accept a much-diluted version of the Dissenters' broad submission that the circumstances of the Merger Agreement call for a DCF valuation to be taken into account. This is principally due to (1) the involvement of Baring on both sides of the Transaction, (2) the existence of a controlling shareholder keen to sell yet eager to retain some indirect albeit significantly reduced interest in the Company, and (3) the fact that key market participants involved in and/or observing the Transaction (most importantly Houlihan Lokey, who gave a Fairness Opinion to the Company's Special Committee) considered a DCF valuation was required;
- (c) I unequivocally reject any suggestion that the Transaction was less than a *bona fide* one and find no credible evidence of any intent, on the part of Baring or the Company, to confer a windfall on the Buy Side and to effectively cheat the Sell Side (which included Premier) on a massive scale. There were no material conflicts of interest which were not adequately dealt with through the Special Committee process which was deployed;
- (d) the Transaction Price, after critical scrutiny, provides important and credible evidence of fair value because the sales process was an arms' length one and, despite concerns more of perception rather than

¹²² *'The Importance of Being Earnest'*.



substance, reflected a transaction between a willing seller and buyer in circumstances where no serious competing bids were either made or shut out;

- (e) I find that the Transaction Price is a more reliable indicator of the fair value of the Shares than the Market Price because it was arrived at taking into account MNPI which may have resulted in the market undervaluing the Shares. Nonetheless there is a risk that because of a commercial desire to effect a sale as soon as possible, Baring's preference for a sale to a known buyer as opposed to a complete outsider, and Premier's blocking position, the Merger Consideration did not reflect the full intrinsic value of the Shares;
- (f) in a sale involving connected parties with no competing bidders and the 'Sell Side' clearly adopting a 'bird in the hand' stance, it would be surprising if the Transaction Price was above the intrinsic value of the Shares and more plausible that the Transaction Price was somewhat lower;
- (g) neither side has persuaded me that either the Transaction Price or, alternatively, a far higher DCF-derived valuation provides the sole solution to fairly appraising the fair value of the Shares. However:
 - (1) the Company has persuaded me that the fair value is clearly much closer to the Transaction Price than the US\$76.51 contended for by the Dissenters' Expert, Professor Gompers, and
 - (2) in light of the Houlihan Lokey DCF analysis (which suggested a mid-range value of just over \$33 per Share) and the more rigorously tested Fischel (modified by Gompers) DCF analysis herein (which is indicative of a value over \$40 per Share), I find that the fair value most likely lies somewhere between the Transaction Price and the DCF value approved by this Court.

228. The independent DCF analysis of Professor Fischel (which I have accepted with one notable modification which results in a slightly lower discount rate and, as a result, a slightly higher per Share value than he contended for at the top of his range) points to a value of just over \$40 per Share. The independent DCF analysis of Houlihan Lokey (the technical validity of which the Dissenters' Expert did not challenge) indicates an upper value of just under \$40. This lends credibility to the DCF value I have reached, subject to concerns about the precise level of reliability of the August 2017 Projections, even as adjusted to take into account the China Bilingual 5 Year Forecast.

229. These concerns are ultimately not about the fairness with which the Projections have been prepared by honest and skilled professionals. It is more that, it seeming obvious to me that "sales patter" by insiders provide no reliable evidence as to value, the Company's business prospects while largely stable were also materially unpredictable.



If short-term budgetary projections were indeed “stretching” ones which were never actually achieved, long-term projections must be viewed as even less reliable, as Mr Halder testified. The most insightful part of his testimony in this respect, which I accept, was the following passage (already quoted more fully above):

“modelling risk weighting would not have materially improved our day-to-day decision making because the business was sufficiently strong to withstand individual schools materially underperforming...and as a business we had already decided to accept the large risks associated with doing business in many of the markets we were in...”

230. In my judgment, this evidence serves as a window through which the ‘real world’ in which the Projections were prepared can best be viewed, and supports the firm conclusion that the DCF valuation alone should not form the main foundation for appraisal in the particular circumstances of the present case where there is also other credible but not entirely reliable evidence of fair value. How then, can the Court take market indicators into account following a trial at which one Expert contended for reliance on market data alone and the other placed sole reliance on a DCF analysis?

231. *Re Qumar* provides a valuable example of how to resolve the conundrum of an imperfect DCF analysis and imperfect market evidence as to the fair value of a company’s shares in a section 238 appraisal case. In that case the Court was presented with a choice between:

- (a) a dissenters’ expert who contended for a DCF valuation producing a value nearly five times the merger consideration; and
- (b) a company’s expert who proposed a blended approach of 50% DCF and 50% market trading price, resulting in a value of less than the transaction price.

232. Nonetheless, Parker J adopted the blended approach of Ms Glass for the company because he was clearly unable to confidently rely exclusively on either a market price or a DCF analysis. This conclusion was reached against the background of the following findings:

- “73. The DCF methodology can be an accurate measure of fair value. However, it depends upon the reliability of the models/projections, the various assumptions, and the validity of the inputs. Even a slight



difference in these inputs can produce large variances. It also relies on subjective judgments to a large extent and can be easily manipulated by applying certain assumptions in the context of litigation. As it is also something of an abstract concept, a cross-check may also be needed to bring a DCF valuation back to the 'real world' and prevailing commercial context.

- *"141. I have concluded that the share price of the Company in the particular circumstances of this case and the NASDAQ market at the time can reasonably be relied upon as good evidence of value. It therefore also provides a good cross check against the DCF outcome of fair value";*
- *"173. I do not accept that Mr Osborne's valuation is sustainable against the market price analysis of Ms Glass which I have accepted was reasonably conducted. Nor is it sustainable against the contemporaneous views of the analysts' community";*
- *"176. The logic of this finding is that a 100% DCF valuation is not the only appropriate valuation method in this case. I accept the blended approach adopted by Ms Glass as the best way of arriving at the fair value of the Dissenters' shares. The DCF and market trading approach both have advantages and disadvantages. Giving equal weight to both is in my view the most appropriate way to determine fair value in this case."*
- *"188. Projections of this length were not prepared as a matter of course by the Company and it needs to be borne in mind that they were prepared in connection with approval sought for a statutory merger with Ctrip, its 94% majority shareholder at the time. D&P relied on Management Projections produced for the purpose and the Proxy Statement."*
- *"189. I accept that the reliability of such projections may be affected by the purpose for which they are prepared and are in theory are susceptible to optimistic or more conservative treatment. The question in this case is whether they have in fact been prepared on a basis which means they are not reasonable, because they were prepared in order to fulfil another purpose which sought to reduce the value of the Company (i.e. were biased), or because they have been carelessly prepared, or contain obvious errors and are therefore unreliable or wrong for that reason."*
- *"201. Ms Glass concluded, after having conducted her own detailed analysis, that the projections were by and large reasonable, save for one*



adjustment she made relating to income tax as a result of an exchange with Mr Zhu at the Management Meeting.”

233. Although the justification for the company’s expert adopting a blended approach in that case is not explicitly set out, it seems clear that Parker J felt a combination of the market price and a DCF valuation was more reliable overall than a standalone valuation basis in circumstances where:

- (a) the management projections were considered reasonable, but it had been alleged they were unreliably conservative;
- (b) the market in the shares was regarded as providing good evidence of value, but it was said that the shares were grossly undervalued;
- (c) since the DCF valuation methodology was “*something of an abstract concept, a cross-check may also be needed to bring a DCF valuation back to the ‘real world’ and prevailing commercial context*”; and
- (d) Parker J concluded:

“411. The consequence of a blended approach between a market trading valuation approach of the shares prior to the Merger and the DCF method leads in my view to a just and equitable outcome which will determine fair value for the Dissenters’ shares” [emphasis added].

234. A blended approach between the Transaction Price and the DCF valuation appears to me to lead to a just and equitable outcome in the present case where I have partially accepted each Expert’s criticisms of, *inter alia*, the Transaction Price and/or a DCF valuation as suitable sole valuation methodologies. But neither Expert has proposed a blended approach. In *Re Shanda Games Limited*, FSD 14 of 2016 (NSJ), Judgment dated April 25, 2017 (unreported), Segal J approved the following statement of principles which were uncontroversial in the present case, and to which I have already referred above:

“85... in his opinion in Re Appraisal of Dell Inc. 2016 WL 3186538 (Dell) Vice Chancellor Laster quoted with approval dicta in this issue from a number of other cases as follows... :



"In discharging its statutory mandate, the Court of Chancery has discretion to select one of the parties' valuation models as its general framework or to fashion its own". M.G. Bancorporation, 737 A.2d at 525-26. "The Court may evaluate the valuation opinions submitted by the parties, select the most representative analysis, and then make appropriate adjustments to the resulting valuation". The court also may "make its own independent valuation calculation by . . . adapting or blending the factual assumptions of the parties' experts." M.G. Bancorporation, 737 A.2d at 524. It is also "entirely proper for the Court of Chancery to adopt any one expert's model, methodology, and mathematical calculations, in toto, if that valuation is supported by credible evidence and withstands a critical judicial analysis on the record." Id. at 526. "When . . . none of the parties establishes a valuation that is persuasive, the Court must make a determination based on its own analysis." [emphasis added]

235. I am satisfied that section 238 of the Companies Law confers jurisdiction on this Court which permits "*adapting or blending*" the approaches proposed by the Expert valuers. Should I give more weighting to either the Transaction Price or the DCF valuation or should each valuation measure be given equal weighting? I find this a very difficult question. Looking at matters in the round, it is on balance clear that my findings thus far overall justify the further finding that I consider that more weight should be given to the Transaction Price than to the DCF valuation. In other words, I have in substance used the DCF valuation as a cross-check for the Transaction Price rather than the other way around. I have not formed the view that the Transaction Price is so seriously lacking in credibility that the starting point should be a DCF analysis, with some account being given to the negotiated Transaction Price. In many important respects (save for rejecting his view that I should ignore a DCF valuation altogether), I have preferred the approach of Professor Fischel to that of Professor Gompers, who championed exclusive recourse to a DCF valuation approach. However I have accepted Professor Gompers' opinions on the unreliability of the Market Price and (in part) the unreliability of the Transaction Price.
236. I accordingly apply a 60% weighting to the Transaction Price and a 40% weighting to the DCF valuation approved by this Court (to be computed by the parties based on the findings recorded above). That should (and is intended to) result in a valuation which is modestly more than the Transaction Price of \$32.50 but still within the potential range of DCF values calculated by Houlihan Lokey for the purposes of their Fairness Opinion.



Minority Discount

237. Neither the parties nor the Experts positively proposed the application of a minority discount. Professor Fischel opined as follows in his Expert Report:

“92. Finally, a DCF analysis...does not incorporate any valuation discount that may be applicable to minority holdings in a controlled company like Nord Anglia Education. However as noted above, I understand that the CICA has ruled that when a dissenting shareholder possesses a minority shareholding, it is to be valued as such.”

238. Professor Gompers in his Expert Report opined in the salient part as follows:

“422. The empirical evidence...is consistent with no minority discount and suggests a minority discount of no greater than 2% for the Dissenters shares in Nord Anglia if one were to be applied...Based on my review of the literature, I have identified no empirical studies that focus on the Cayman Islands, and as such, I relied on the values above for the United States and Hong Kong. These articles suggest a minority discount of up to 2% and potentially smaller and are consistent with no minority discount.”

239. Mr Bompas QC in his closing oral submissions argued that having regard to the state of the evidence and the failure of the Company’s counsel to address the minority discount issue in their closing submissions, the Court should direct no discount at all¹²³.
240. After the conclusion of the trial on December 20, 2019, the Judicial Committee of the Privy Council on January 27, 2020 delivered judgment in *Shanda Games Ltd.-v-Maso Capital Partners Ltd et al* [2020] UKPC 2. This was an appeal by dissenters’ against, *inter alia*, the Cayman Islands Court of Appeal decision holding that a minority discount should generally be applied in section 238 cases. In that case the experts agreed at trial that (a) fair value should be determined on a DCF valuation basis, and (b) if a minority discount was required, it should be 23%. Lady Arden (delivering the advice of the Judicial Committee) summarised the crucial findings as follows:

“42. In the opinion of the Board, it is a general principle of share valuation that (unless there is some indication to the contrary) the court should value the actual shareholding which the shareholder has to sell and not some hypothetical share. This is because in a merger, the offeror does not acquire control from any individual minority shareholder. Accordingly, in the absence

¹²³ Transcript Day 14 page 177 lines 5-22.



of some indication to the contrary, or special circumstances, the minority shareholder's shares should be valued as a minority shareholding and not on a pro rata basis.

55. It follows that the judge should not have held that fair value always means no minority discount (see, for example, judgment of the judge, para 93, second sentence). That could not be a bright-line rule to be applied in every case. Similarly, it was not open to CICA to hold that a minority discount should invariably be applied as a matter of law. The legislature's direction is to find the 'fair value' of the dissenter's shareholding. Because of the narrow scope of this appeal, the Board is not in a position to rule out the possibility that there might be a case where a minority discount was inappropriate due to the particular valuation exercise under consideration."

241. The general rule and governing legal principle is that *"in the absence of some indication to the contrary, or special circumstances, the minority shareholder's shares should be valued as a minority shareholding and not on a pro rata basis."* However, if section 238 does not require *"that a minority discount should invariably be applied as a matter of law"*, in my judgment it must be for the parties and their experts to determine, in the first instance, what minority discount, if any, they consider is appropriate in each individual case. The starting assumption is that a minority discount should be applied; but this does not justify the Court determining that a particular minority discount should be applied as a matter of law without any evidential foundation.
242. In *Shanda Games*, the Court of Appeal (on March 6, 2018) applied a minority discount in an amount agreed by the respective experts, holding that a discount must be applied as a matter of law. The Privy Council upheld this decision, while clarifying that a minority discount might not be required in the particular circumstances of individual cases. The governing legal principle applicable to fair value appraisals under section 238 was articulated by Lady Arden as follows:

"47...where it is necessary to determine the amount that should be paid when a shareholding is compulsorily acquired pursuant to some statutory provision, the shareholder is only entitled to be paid for the share with which he is parting, namely a minority shareholding, and not for a proportionate part of the controlling stake which the acquirer thereby builds up, still less a pro rata part of the value of the company's net assets or business undertaking..."

243. When the Experts in this case prepared their Reports, the state of the law was that a minority discount was required as a matter of law. The Company adduced no expert evidence supporting the need for a minority discount on economic grounds, let alone proposed a specific discount figure. The Dissenters have adduced evidence through Professor Gompers to the effect that:



- (a) no minority discount is required on the facts of the present case, in effect because there is no economic justification for viewing a minority shareholder's Shares in the Company as being financially impaired;
- (b) if a discount is legally required in general terms, the basis for the discount must be based on the value of control to the controlling shareholder or the negative value impact of the absence of control for the minority shareholder; and
- (c) if a minority discount is required as a matter of law to subtract the value of control, it would not (based on US and Hong Kong source material) exceed 2%.

244. Professor Gompers' evidence that no minority discount is economically justified is not contradicted by any other evidence. On that basis alone, in my judgment I could perhaps find that no minority discount is required, the legal assumption in favour of a minority discount having been displaced. Should I without the assistance of expert evidence decide for myself that Professor Gompers' uncontradicted economic views have no merit? I am required to form my own independent judgment and I find that the economic position is relevant in light of the governing legal position which trumps Professor Gompers' view that economically speaking, "*a company's DCF value equals its fair value*"¹²⁴.
245. There is no judicial guidance as to how to determine the appropriate minority discount under section 238 where the figure is not agreed. In *In re Shanda Games* [2018 (1) CILR 352] (CICA), the experts were agreed as to the amount of the discount, if one was required; the legal requirement for one was what was in controversy. How one assesses the amount of the discount, assuming a legal requirement to value the actual shares held by the minority, was not considered. Martin JA's central finding was as follows:

"50 For these reasons, it appears to me that s.238 requires fair value to be attributed to what the dissentient shareholder possesses. If what he possesses is a minority shareholding, it is to be valued as such. If he holds shares to which particular rights or liabilities attach, the shares are to be valued as subject to those rights or liabilities. As a matter of mechanics, this can be done by adjusting the value that the shares would otherwise have as a proportion of the total value of the company; but failing to make such adjustments means that particular rights or liabilities will often be ignored, and the shares will be valued as something they are not."

¹²⁴ Expert Report paragraph 413.



246. This decision was upheld by the Privy Council with the addition of an important and practical *caveat*. This was to the effect that in some cases, where the amount of the minority discount was not agreed (as it was in *Shanda Games*), it might be open to this Court based on the specific valuation evidence before it to find that no discount at all was required. Again, the question of what factual issues might be relevant to deciding whether or not a discount was or was not required was not judicially considered.
247. In *Re Qunar*, the company's expert admitted that she would not ordinarily apply a minority discount "*assuming a publicly traded liquid security*", but proposed a 4.7% minority discount, presumably based on the legal assumption that one was required. The dissenters' expert contended for a 0% discount. Parker J (at paragraph 406) found that "*that the value of any discount to be attributed to the Dissenters being minority shareholders in the present case is nil*"¹²⁵ It appears to me that that Parker J concluded that there was no reliable evidence before the Court to support a finding that a minority discount in a specific amount or based on specific valuation considerations was required. He astutely adopted a legal approach the correctness of which has only been recently confirmed by the Privy Council in *Shanda Games*.
248. In the present case, I am bound to accept that a minority discount is required to take into account any value attached to control which cannot be attributed to minority shares. The Dissenters' Expert has provided an opinion as to what that discount should be, assuming that the value of control should be assessed in the same way as in the US and/or Hong Kong. However I feel unable to fairly assess the validity of that opinion.
249. I find myself in a similar position to that of Parker J in *Re Qunar* of having no sufficient evidential basis for deciding the factual dimension of the valuation issues flowing from the legal requirement to value the Dissenters' Shares as minority shares, rather than simply as a *pro rata* portion of the Company's shareholding as a whole.
250. In future cases, in light of the guidance only recently received from the Privy Council in *Shanda Games*, expert witnesses and this Court will doubtless be able to develop on an incremental basis well-formed views on what economic factors are relevant to determining the need for and size of a minority discount under Cayman Islands law.
251. If, contrary to my primary findings, I were required to evaluate and reject Professor Gompers' uncontradicted opinion that no minority discount is required, I would have applied a minority discount of 2% based on his also uncontradicted opinion that this is the maximum discount which could be required.
252. For these reasons I find that no minority discount should be applied as part of the valuation process in all the circumstances of the present case.

¹²⁵ Paragraphs 403; 406.



CONCLUSION

253. In summary, I find that the fair value of the Dissenters' Shares should be computed by a blended approach comprised of (a) 60% of the Transaction Price of US\$32.50, and (b) 40% of a DCF valuation based on the model constructed by Professor Fischel, with the WACC or discount rate adjusted downwards¹²⁶ to a precise amount which I leave the parties (in consultation with their Experts, if required) to calculate. The reduction of the discount rate from Professor Fischel's lowest proposed rate of 8.98% to what I very roughly estimate will likely be in the region of 8.7% should result in a total DCF *pro rata* share valuation no more than 10% above the upper limits of Professor Fischel's range (US\$41.45). I leave the precise result to be calculated by the parties.
254. The net result will be a valuation of the Dissenters' Shares which falls within the DCF valuation range originally proposed by both Professor Fischel within these proceedings and by Houlihan Lokey, independent advisers to the Special Committee, in connection with the approval of the Merger Agreement. I have adopted a blended approach which was not proposed by either Expert because I found that the Transaction Price and, to lesser but significant extent, a DCF valuation provided more reliable indications of the fair value of the Shares than the Market Price.
255. This result reflects my findings that fair value may properly be found well above the Market Price of US\$30.45 contended for by the Company, but far below the US\$76.51 contended for by the Dissenters. Neither Expert positively proposed the application of a minority discount, despite being aware of a legal presumption that there should be such a discount under Cayman Islands law. Professor Gompers positively opined that no minority discount was required without being challenged by Professor Fischel. I accordingly find that no such discount should be applied.
256. I will hear counsel as to the terms of the final Order and costs, as well as in relation to any other matters arising from this Judgment, if required.



THE HONOURABLE MR JUSTICE IAN RC KAWALEY
JUDGE OF THE GRAND COURT



¹²⁶ By reason of substituting Professor Gompers' pre-tax Cost of Debt figure of 5.8% for Professor Fischel's 8.16%.